NATIONAL TOXIC SUBSTANCE INCIDENTS PROGRAM (NTSIP)
2014 TRAINING MANUAL

02/2013

TABLE OF CONTENTS

INTRODUCTION

The National Toxic Substance Incidents Program (NTSIP) Training manual is designed to provide state coordinators with specific instructions to successfully input data for the NTSIP system for incidents occurring in 2014-2017. This manual provides explanations and instructions for each question in the system. If, however, you are unable to answer a question after consulting this manual, pose your question in PH Connects. Technical advisors will respond, and in that way, other states who have similar questions will all have the correct answer.

The following two sections provide instructions to complete the data collection form. The first section lists general instructions. The second section discusses the intent and instructions for each question of the data collection form. Questions that are no longer

required were left on the screens and can be used by the states if they chose, but have had their numbers removed and will not be used by ATSDR for reporting purposes.

GENERAL INSTRUCTIONS

Information may be directly entered into the NTSIP system from documentation. If desired, you can print a copy of the NTSIP record and attach it to the documentation for storage. Completing a hardcopy of the data collection form is not required.

Write down or directly enter information immediately. Do not rely on memory to complete the data entry at a later time.

Verify information (e.g., repeat information back to the notification contact and verify spelling).

When applicable, use leading zeros for dates.

Verify that the answer is within the allowable range for each question.

Leave questions blank when the skip pattern allows you to skip a question or if the answer is unknown.

Use the "Other" option sparingly and only when none of the available options are appropriate. For questions where the "Other" option is available, make sure to complete the Other text field. Do not repeat or combine any of the response options listed for that question in the Other text field. For example, when you select "Other" and enter descriptive text in the adjacent blank field, the description cannot include terms that describe any of the available options. **Enter the descriptive text using all uppercase letters.**

Use categories for approximating item responses that are not exact, such as time of event and chemical quantity.

Make all attempts to receive notifications and enter all existing preliminary data in NTSIP within 48 hours of the occurrence of the event. To save the event, the following **minimum information** is needed:

- Question 1 (whether the event meets the NTSIP case definition)
- Question 4 (the event date)
- Question 6 (the event location)
- Question 37 (synopsis)

However, you should enter all available data. You should only save the event as complete if you feel that you have all of the data that you can get or will be able to get for that event. If you make an event complete and receive additional information at a later time, you can still make changes to the record. However, once you delete an event, it is no longer editable. If you delete an event by mistake, you will need to create a new record.

Note: There are two user types in the NTSIP system: State user and Field user. The State User can complete any event as described in this manual. The Field user can enter data for a new event, save an event with a status of Review, open an existing event with a status of Review, or modify data in an event with a status of Review. Question 1 is not an available option to the Field user. The State user must answer Question 1 in an event with a status of Review in order to save the event as Pending and answer all other required questions to save it as Complete

QUALITY CONTROL

For consistency in data collection and ease of analysis, ATSDR has emulated the data collection form in the web-based NTSIP application, which is provided to the participating states. Users enter preliminary data into the NTSIP system on their PC. Additional information is added as it becomes available until data entry for that year is closed.

Once per quarter, each state will select a 10% random sample to verify data entered in the system. The results of this procedure will be transmitted to the ATSDR technical advisor. States should periodically run the duplicate event report to identify potential duplicates. If a duplicate is found, it should be marked surveillance = “No” - duplicate.

ATSDR will download data periodically throughout the year and perform cross reference checks. States should review the report and update records as needed. States are also welcome to download their own data and perform quality control checks.

The technical advisor’s role in data quality is to assist recipients in establishing and maintaining appropriate and timely schedules for the surveillance process. This includes monitoring recipients’ progress toward getting events into the system within 48 hours; assessing completeness of the data; and providing suggestions for improving timeliness and completeness of the data and for receiving notification of an event and data within 48 hours of an event as necessary. They are also available to answer questions that are not covered or are unclear in the training manual.

ATSDR is responsible for security and limits access to the SAS data sets to selected ATSDR staff and researchers that have completed a data sharing agreement. Confidentiality of notification contacts and responsible parties is protected since ATSDR will not release names, street addresses, telephone numbers, and coordinates without state permission. Interpretation of the results of the analyses is conducted by ATSDR staff and by the states for their state-specific data.

States retain all documenting material for at least three years (i.e., the records for 2014 will be kept through 2017). These records may be kept in a storage facility outside the state health department as long as the location is secure and has limited access. In the event ATSDR staff feels that one or more discrepancies exist in the data set, the states

will use documented information to verify whether the event was correctly entered in the computer database.

PUBLICATIONS

ATSDR encourages each state to analyze its state data and produce publications and presentations in order to disseminate NTSIP information to responders, industry, the public health community, emergency preparedness officials, and other interested parties. Dissemination is a key element for decision-making related to releases of hazardous substances and is the major way that NTSIP data can be used for primary and secondary prevention.

ATSDR requires that all publications and presentations of NTSIP data that are released to the public receive prior ATSDR approval before release. This includes quarterly, annual, and cumulative reports that will be released to the public (not just sent to ATSDR); fact sheets, graphs, tables, maps, and other compilations of data; posters, slides, and any written text of oral presentations; articles for publication in state or private newsletters, magazines, or journals; and analyses conducted by third parties, such as universities. If it is necessary to release raw data to an entity outside of the NTSIP program, a data sharing agreement should be completed. Instructions on how to do this can be obtained from your technical advisor.

ATSDR will attempt to review these materials as quickly as possible, but each review of a draft may take up to two weeks, and more than one draft may be necessary. Therefore, each state must plan well ahead of their needs and allow a month for the overall review process. Submit the NTSIP Data Clearance, Data Request or Publication Request Form with the material to be reviewed.

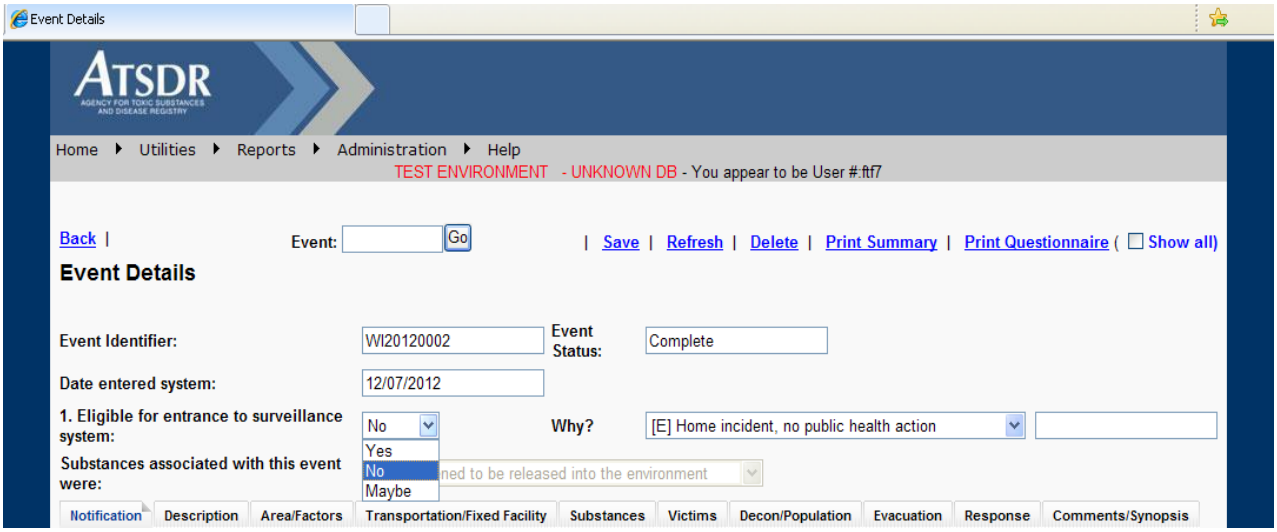
Use the following funding statement on all publications that were produced using ATSDR support:

"This document was supported by funds from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) trust fund provided to the [official agency name] from the Agency for Toxic Substances and Disease Registry and the Centers for Disease Control and Prevention, U.S. Department of Health and Human Services."

In all publications the following disclaimer must be made "NTSIP states use a variety of available data sources and reporting procedures to complete the incident form. Aggregating data across states and across incidents should be interpreted with caution." In any publication where national estimates are used an additional statement must be included "The lack of uniform reporting methods is a limitation in making national estimates."

QUESTION SPECIFIC INSTRUCTIONS

FIGURE 1: EVENT IDENTIFICATION PANEL



EVENT IDENTIFIER

Intent: Each event is automatically given a unique event ID that is used to link the records of events from the different data files. Use the event identification number to recall an event in order to view or edit the record.

Instructions: The NTSIP system automatically generates a 10-character identification code for the event in the Event identifier field (Figure 1) when you save the event. The first two digits of the event identifier equal the state abbreviation where the event occurred. The next four digits equal the year in which the event occurred. The last four digits equal a sequential number.

Note: Write this number into your written documentation.

DATE EVENT WAS ENTERED INTO NTSIP SYSTEM

Intent: Indicates the date when the event was entered in the NTSIP system.

Instructions: The current system date (mm-dd-yyyy format) is automatically entered in the Date entered system field (Figure 1) when the event is entered into the NTSIP system. Write this date into your written documentation.

Note: This date is not necessarily the date when the event occurred or the date when you were notified of the event.

NTSIP has a goal of having initial information for all events entered into the database within 48 hours of occurrence.

QUESTION 1: BASED ON THE NTSIP CASE DEFINITION IS THE EVENT ELIGIBLE?

Intent: Determines the eligibility of a toxic substance incident for NTSIP.

Instructions: Select the Yes or No or Maybe option in the Eligible for entrance to surveillance system field (Figure 1). If “No” was selected, choose one of the following reasons why:

[1] Hoax
[2] Petroleum, no public health action or victim
[3] Small quantity
[4] Chronic
[5] Insufficient information
[6] Not a hazardous substance
[7] Controlled/legal/permitted release
[8] Duplicate
[A] No release, no public health action
[B] Suspicious activity (potentially terrorism)
[C] Not a potential NTSIP event (NTSIP just being used to capture data)
[D] Other
[E] Home incident no public health action
[F] Stack release, no public health action or victim

NTSIP EVENT DEFINITION

An uncontrolled or illegal acute release of any toxic substance. (A toxic substance includes, but is not limited to, any element, substance, compound, or mixture including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism either directly from the environment or indirectly by ingestion through the food chain, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malformations including malformations in reproduction, or physical deformation in such organisms or their offspring. Toxic substances include chemical, biological, radiological, and medical materials.)

Note: If more than one release occurs of the same chemicals from the same source within the same facility on the same day and each release is distinct (e.g., the release started, was controlled and stopped, then happened again), enter each release as a separate event even if the company considers them one incident.

States are highly encouraged to record as surveillance=no events that have injuries, but don't meet the reporting quantity criteria, so that the substances involved can be analyzed at the end of the year for inclusion on next year's list.

STEP 1- NTSIP EXCLUSION CRITERIA

Step 1- Include only acute, emergency releases (i.e., short-term, sudden, unexpected, uncontrolled, serious events requiring immediate action). For example, include a release of PCBs from a transformer struck by lightning or a car. Use 72 hours as a rule of thumb; an event that lasts longer than 72 hours is considered to be chronic. Do not include chronic releases (e.g., releases occurring over a period of time or releases that do not meet the 72-hour rule). For example, do not include a PCB leak at a transformer that has been occurring for years or PCBs found in a landfill when it is not known how long they have been there. These are chronic, non-emergency situations, and do not qualify as NTSIP events. Do not include the long-term or continuous release of hazardous substances above permitted quantities (e.g., smokestack or waste water effluent above regulatory amounts). While these may constitute public health problems, they are chronic events, and thus are not eligible for NTSIP

Step 2- Include events at private homes (or other types of private property) only when there was a public health action taken (e.g., evacuation, health advisory, well survey, alternate water, fishing ban, prohibit consumption of livestock/produce, health investigation, shutdown of water intakes, or environmental sampling). Do not include incidents in private residences with injuries unless there is a public health action taken.

Step 3- Do not include releases where the only substance involved was petroleum fuels (e.g. butane, crude oil, kerosene, gasoline, or propane) if there was no injury or public health action. (e.g., evacuation, health advisory, well survey, alternate water, fishing ban,

prohibit consumption of livestock/produce, health investigation, shutdown of water intakes, or environmental sampling). petroleum being used as a fuel in a vehicle at the time of the incident You can only include permit violations (e.g. a company releasing more than its allowable amount of substance in the smokestack), as long as there is a public health action.

Step 4- Smoke stack or flare incidents are included only when there is a public health action (e.g., evacuation, health advisory, well survey, alternate water, fishing ban, prohibit consumption of livestock/produce, health investigation, shutdown of water intakes, or environmental sampling) or an injury caused by the chemical.

STEP 2- NTSIP MINIMUM QUANTITY CRITERIA

Once all of the exclusions are met, you need to decide if the substance meets the minimum quantity.

Step 1- Is it on the NTSIP any quantity reporting list (Appendix I), if so include.

Step 2- Is it on the NTSIP 1 pound reporting list (Appendix II), if so include if 1 pound or greater were released.

The History of the any quantity and 1 pound reporting list, Appendix III details how these lists were developed. Additions to this list will be considered on a yearly basis.

Step 3- For substances set forth below, include only when their minimum quantity is met. These chemicals were specifically chosen because excess staff time was used for follow-up in which very few injuries/deaths were occurring at lower levels.

Substance	Minimum quantity
Paint, Paint not otherwise specified (NOS), Paint or Coating NOS	100 gallons
PCBs with a concentration greater than 50ppm	10 gallons
Propylene glycol, ethylene glycol -	50 gallons
Freons	100 pounds
Carbon monoxide	concentrations ≥ 50 ppm

Step 4- For other toxic substances not listed, Can you identify it and is it hazardous? Do not include events where the substance cannot be identified or categorized. However, include events where the substance can be classified into a substance category, such as acid, pesticide, methamphetamine production chemicals, or paint “not otherwise specified” (NOS). Look up an online MSDS or other information on the substance to help you determine if it is hazardous if necessary.

Step 5- If it is hazardous and you can identify it, include only if the amount released is 10 pounds or 1 gallon or more. Releases of unknown quantity of substances not on the list are included if there is sufficient information to assume it is over 10 lbs/1 gallon.

OTHER CIRCUMSTANCES

Include pesticide events when regulations are not followed or operator error occurs, such as application to the wrong location, in a wrong concentration or quantity, spills, neglecting to make appropriate changes to ventilation system, and inappropriate work practices. Do not include pesticide drift (i.e., aerial application that drifts beyond the target area) when it is properly applied, but due to unexpected conditions, such as a change in wind conditions, it drifted.

Include intentional, illegal, and acute releases of hazardous substances, such as the release of Sarin by terrorists. Similarly, deliberate exposure of individuals to pepper spray would be an event except when the exposure is controlled, legal, and permitted such as by law enforcement officials.

Include fires in private residences if an unusually large quantity of a toxic substance or a hazardous substance that is not usually present in private homes was in the house prior to the fire (e.g., fire at a house containing an unusual quantity of old PCB-containing transformers because the PCBs would not normally be present in this quantity; fire in a house where hydrazine [rocket fuel] was present because hydrazine is not normally present in homes). Also there needs to be a public health action.

Include events where a hazardous substance is released from an overflow and/or containment structure to the general environment or workers were exposed either during release, chemical recovery, or cleanup. Exclude spills contained within a closed overflow and/or containment system that is operating as designed and intended, there is no release to the general environment including gases or vapors, and no one was exposed even during any cleanup. These chemicals may need to be recovered and recycled from the containment structure, but this is not considered cleanup if the chemicals remain contained within closed systems.

Include a small freight package (e.g., UPS, FedEx) incident only if the identity of the hazardous substance is known. Do not include small freight package incidents involving stained packages where no apparent spill occurred.

Include releases associated with illegal drug laboratories when all the NTSIP criteria are met. The mere existence of these labs does not qualify them as an event. You can include them when a hazardous substance was released within 72 hours of the authorities initiating its investigation (usually an active cooking lab qualifies). Determining whether or not the release occurred within 72 hours can be difficult; however, if there is no apparent evidence of a release, but responders suffered injuries while entering the premises, this is evidence of a release. If there is absolutely no evidence of a release of chemicals or a public health action, such as EPA performing a

clean-up, then exclude it. If it is not known that a release or a public health action has occurred (and every attempt has been made by the NTSIP state to find this out), and no one was injured, then exclude it. If the primary issue is that there was a known release, but you do not know what the chemical was and you have attempted to find out what the specific chemical was, then type in Meth Lab Chemical NOS in the Entered Name field (see Figure 8). Most individual Meth Lab chemicals are on the NTSIP any quantity list.

Include incidents involving suicide and attempted suicide only when the method was non-medicinal, persons other than the individual attempting suicide could have been exposed, and the hazardous substance met the case definition. The chemical must have been released to the environment, not confined to a bottle or other container. Include suicides where other persons who found the body or cleaned up the hazardous material were exposed, or if there was secondary contamination such as to emergency services or medical personnel. Do not include suicide from carbon monoxide gas if no one else is exposed once the source is shut off, and no clean up is required. For example, include a suicide by chloroform in an enclosed space where responders were exposed and the chloroform had to be cleaned up from contaminated surfaces.

Include explosions that are uncontrolled or illegal, and where the explosion caused a dispersal of hazardous substances. Do not include explosions where essentially no chemical exposure occurred (e.g., the hazard was the physical force of wind velocity). For example, exclude events where the only chemical listed is dynamite. The logic is that exposure to nitroglycerin in an unexploded stick of dynamite is minimal, and the purpose of NTSIP is to track exposures to hazardous substances.

Exclude fires at other locations if there was no hazardous substance present before the fire (e.g., a fire at a lumberyard because no hazardous substances were present before the fire; a fire where plastics and rubber had been dumped long before because the substances present before the fire were not hazardous and had been there a long time; tire fires because no hazardous substances were present before the fire).

Do not include medical mishaps due to misadministration of medical treatments or diagnostic tests (e.g., radiation or pharmaceutical treatment to the wrong patient or in excessive doses) or deliberate internal (controlled) poisonings (e.g., date-rape drug).

Do not include hoaxes. A hoax is a situation where a false claim is made that a hazardous substance is present. For example, a letter is sent containing a message that the envelope contains anthrax bacteria, but is subsequently determined that no anthrax is present. Hoaxes are not events. If you desire to retain hoaxes for state analyses, select the No option for Question 1. Do not code hoaxes as threatened events because no hazardous substances are present.

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NOTIFICATION

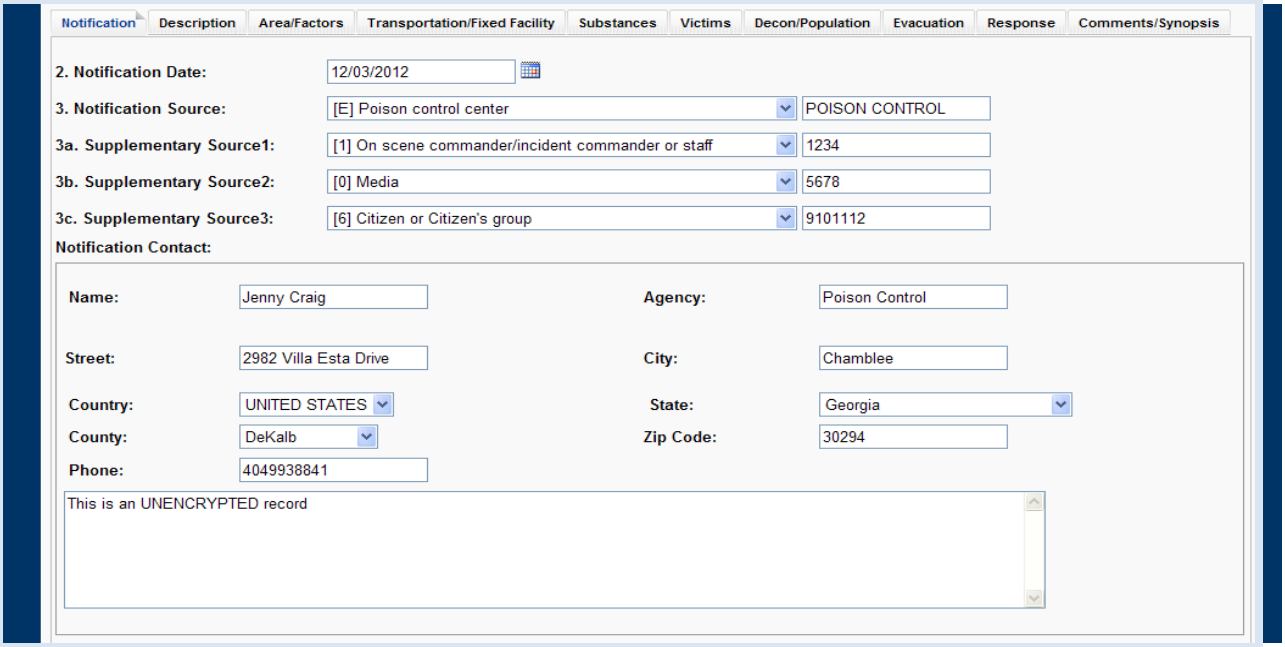


FIGURE 2: NOTIFICATION TAB

QUESTION 2: DATE THE NTSIP STAFF WERE NOTIFIED OF THE EVENT

Intent: This date is used to help identify events entered into the database after more than 48 hours have passed, due to a lag in notification.

Instructions: Select or type the date (mm-dd-yyyy format) notified in the Date field.

Note: This is when you were first notified.

QUESTION 3: WHO FIRST NOTIFIED THE STATE DEPARTMENT?

Intent: Identifies the state health department's initial or primary source of information concerning the event.

Instructions: select the type of source off the list and enter the record number associated with that source type (if available) into the text box to the right.

SUPPLEMENTARY SOURCE FROM PICKLIST 1_____

SUPPLEMENTARY SOURCE FROM PICKLIST 2_____

SUPPLEMENTARY SOURCEFROM PICKLIST 3_____

Intent: Identifies additional sources of information used for the event.

Instructions: For each additional source, select the type off the list and enter the record number associated with that source type (if available) into the text box to the right (Figure 2):

Source list

[0] Media
[1] On scene commander/incident commander or staff (e.g., fire, police, EPA)
[2] Health agency other than the state health dept
[4] Environmental department or division
[5] Emergency government/emergency services
[6] Citizen or citizen's group
[7] Owner/operator of facility, vehicle, or vessel
[8] Other_____(15)
[9] Unknown
[A] DOT/HMIS
[B] Other government agency
[C] Other program within state health department
[D] Hospital or Hospital dataset
[E] Poison Control Center
[F] National Response Center
[G] ACE team

Note: In most cases, the initial sources are records kept by another state or federal agency, such as the National Response Center designated to receive the first reports of spills. In other cases, there may be a story in the news media.

Include only those responders who are part of the onsite team in On scene commander/incident commander or staff.

Include environmental department databases in Environmental department or division.

Include 911 operators and other responders such as fire and police who are not part of the onsite team in Emergency government/emergency services.

Include Federal, state, and local agencies such as Labor and Industry and the Department of Agriculture, Trade and Consumer Protection in Other government agency.

DESCRIPTION

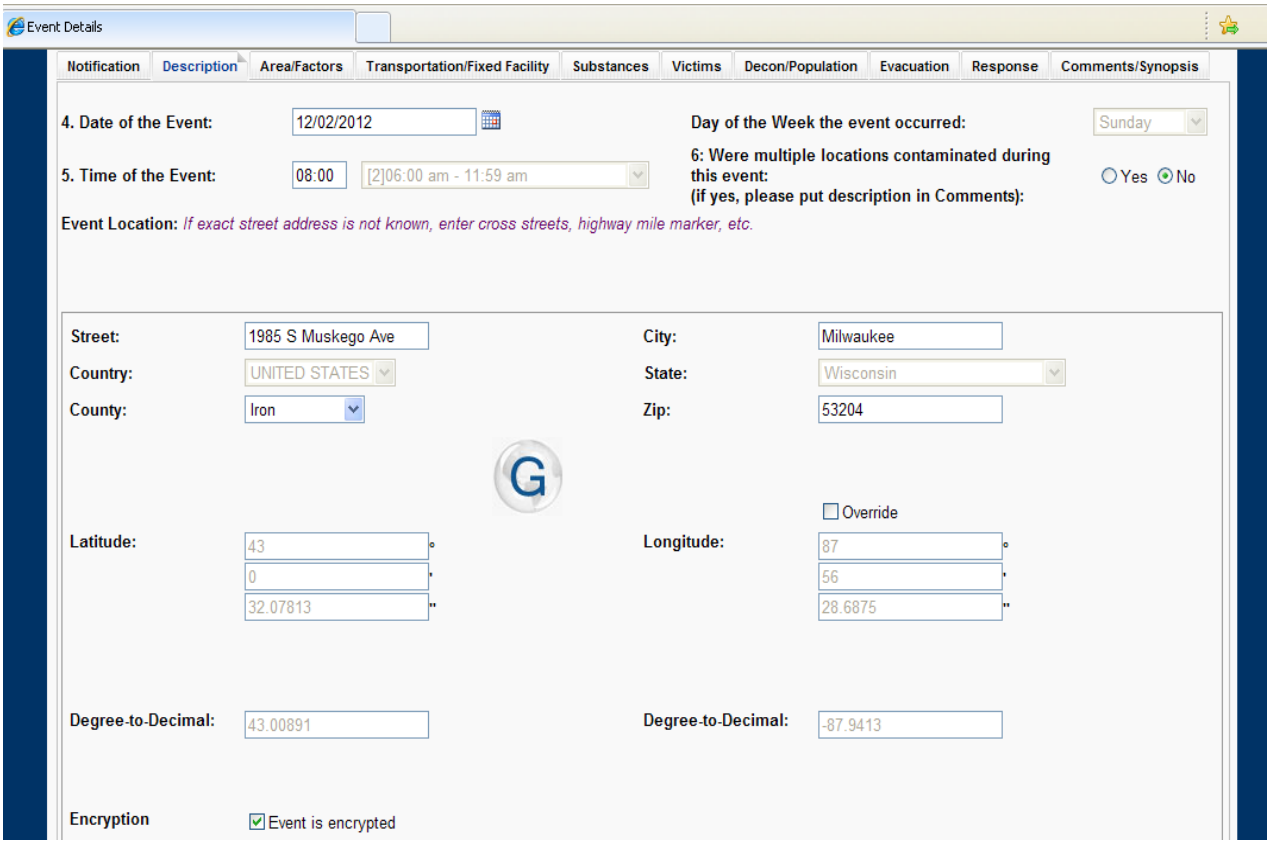


FIGURE 3: DESCRIPTION TAB SCREEN

QUESTION 4: WHAT WAS THE DATE OF THIS EVENT?

Intent: Indicates the date when the event started.

Instructions: Select or type the date (mm-dd-yyyy format) the event started in the Date of the event field (Figure 3). This is a required field. You must know the date when the event started.

QUESTION 5: WHAT TIME DID THIS EVENT START?

Intent: Indicates the time when the event started.

Instructions: Select or type in the time using the 24 hour format (e.g., 15:59) that the event started in the Time of the event field (Figure 3). The time category is automatically displayed in the adjacent field, if you entered a time in the Time of the event field. If you did not enter a time, select one of the following:

- 00:00 am - 05:59 am
- 06:00 am - 11:59 am
- 12:00 pm - 05:59 pm/12:00 - 17:59
- 06:00 pm - 11:59 am/18:00 - 23:59

Note: Try to get the time, but if that is not possible, select the best approximate time category. Do not leave both the time and time category blank, unless you absolutely do not know. This is when the event actually started, not when you were notified.

QUESTION 6: EVENT LOCATION. WERE MULTIPLE LOCATIONS CONTAMINATED DURING THIS EVENT? WHERE DID THE EVENT START?

Intent: To indicate whether or not the event contaminated more than one location. Also Indicates the address and location where the event first occurred.

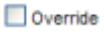
Instructions: Select either of the following for multiple locations, leave blank if unknown.

[ ] Yes
[ ] No

The street and longitude/latitude in the Event Location field (Figure 3) are encrypted to ATSDR and can only be viewed by the state. To unencrypt this information, uncheck the box under the address that indicates that the incident is encrypted. Type or select the appropriate information in the following fields:

Street field - street address (do not use a Post Office box) where the event started. If the exact address is unknown, enter other locating information such as cross streets, highway mile marker, railroad crossing, etc.
City field - city in which the street address is located
State field - two-character state abbreviation in which the city is located
County field - county in which the street address is located
Zip field - Five-digit ZIP associated with the street address
Country – Country in which the event takes place. By default your home country is shown

Click  to automatically enter the longitude and latitude of the address. If you change the data in Questions 4 - 6 after using the GeoCode, Proximity, and Demographics buttons, you will be prompted to press these buttons again to update the coordinates and the population data.

Press  if you want to change the values automatically entered, and then enter values for latitude and longitude in either degree-minutes-seconds or decimal degree format.

Latitude field - latitude in either degree-minutes-seconds or decimal degree format.

Longitude field - longitude in either degree-minutes-seconds or decimal degree format.

Note:: Events involve multiple locations when there is secondary contamination at another location (e.g., hospital emergency room contaminated by victims brought in without being decontaminated appropriately). It could also happen when a transportation event takes place over a distance (e.g., a moving truck spills over a number of miles). Different actions (e.g., contamination, injury, evacuation, clean up) might occur at different locations. In these instances, describe the location of the original spill, even if it is over a long distance, and select the Yes option in the "Were multiple locations contaminated during this event" field. Write a more detailed narrative of the event in the Comments and scenario sections to reflect the locations and what happened.

User entered latitude and longitude data that is out of range for your state will generate a message when saving the event. The latitude and longitude given in the Toxic Release Inventory (TRI) database for fixed facilities is sometimes incorrect, so double-check these values.

QUESTION 7. WAS THIS A PRIVATE VEHICLE OR RESIDENCE?

Intent: Indicates if the location where the event first occurred was either a private vehicle or private residence

Instructions: If it was either a private vehicle or private residence check yes, if not check no. If yes is checked, Q8 will be grayed out to protect privacy.

Note: Check yes for other types of private property that would identify a person.

QUESTION 8: EVENT LOCATION

Intent: Indicates the description of the industry where the event first occurred.

Instructions: Type or select the appropriate information in the following fields:

Event Location Name field - (Figure 3) is encrypted to ATSDR and can only be viewed by the state. Type in the name of the company.

Type of Industry field –Enter the code for the type of industry based on the 2002 NAICS codes. ATSDR strongly encourages at least a four-digit NAICS code, but 6 digits are the most specific. After entering the code and pressing enter, the description for that code will fill in.

If you do not know the code press the button at the end of the list Lookup NAICS code. Press the + in front of the NAICS lookup and it will reveal a hierarchical structure that begins with 20 broad sector two-digit codes. To expand any of the categories you will need to press the + in front of the category. Press the lookup button at bottom left of screen to be taken to the Census bureau's webpage http://www.census.gov/epcd/naics02/naicod02.htm where you can do lookups to get

descriptions of the categories. Once you decide upon a code, go back to the NTSIP data entry screen and find the code.

If the event did not involve an industry select code 998 “Not an industry” or if it is uncertain what the industry was, for example some abandoned drums at a rest area, select 999 “Not identified” from the window at the bottom where is says “Select below if no appropriate NAICS code is found”.

Once you have made your selection, press the OK button at the bottom of page to return to the description tab.

Entered Industry field – Type in the open text field to provide a description of the industry where the event occurred when an exact NAICS code (or NAICS alternative) cannot be found or additional description is desired. This field is available for both states and ATSDR to view.

Note: Select the overall type of activity of the facility, not the part of the facility where the event occurred. Use business directories that describe companies within your state to determine industry type or call the company, if needed. For chemical manufacturing, identify the specific chemical being manufactured at that facility. If more than one chemical is manufactured, report the primary or major chemical or category of chemicals manufactured at that location. For transportation events, select the specific mode of transportation involved in the event (trucking, water transport, air transport, railroad, bus/subway, taxicab, or pipeline). Companies involved in shipping packages, such as UPS or FedEx, can be coded to a variety of industry codes (such as trucking; air transportation; services incidental to transportation; business services, n.e.c.) depending on the particular facility. If a company is transporting goods for another company, select the transport company.

Be as specific as possible with agricultural industries because they are coded differently (e.g., crop farm, livestock farm, agriculture-related operation, or service). For example, “Grain elevator” can be coded to either “424510 Grain and Field Bean Merchant Wholesalers" or “493130 Farm Product Warehousing and Storage.” Distinguish between these two industries with the correct NAICS code. Select health care locations and services as specifically as possible (e.g., hospital, laboratory, physician’s office).

If an event involves an apartment building, select “531110 Apartment building rental or leasing”. If the event was caused by the apartment tenant, select ‘No’ for Question 9. For Q10, select “Not an industry” from the window below the NAICS code select window where it says “Select below if no appropriate NAICS code is found”.

QUESTION 9: IS THE LOCATION LISTED IN QUESTION 8 THE SAME AS THE INDUSTRY (OR ENTITY) THAT CAUSED THE HAZARDOUS SUBSTANCE RELEASE?

Intent: To differentiate between the industry at the location of the event and the industry that caused the event

Instructions: Select either of the following:

[ ] Yes
[ ] No

If you select "Yes," skip to Question 11.

Note: When referring to the industry, you are also referring to a private vehicle or residence. For example if an event occurred in a private residence, but was because of an exterminator, then you would answer No.

QUESTION 10: RESPONSIBLE INDUSTRY NAME (ENCRYPTED)

Intent: Indicates a description of the principal responsible party that caused the event.

Instructions: Select or type the appropriate information in the following fields for the responsible party.

Name field (Figure 3) Type the industry name. This field is encrypted to ATSDR and can only be viewed by the state (unless the encrypted box is not checked).

Type of Industry field - the type of industry based on the provided pick-list of NAICS codes. Refer to Instructions for question 8 to select a NAICS code

Entered Industry field – open text field to provide a description of the principle responsible party that caused the event when an exact NAICS code (or NAICS alternative) cannot be found or additional description is desired (not encrypted).

Note: The note for Question 8 also applies for Question 10.

If an event occurs at a private residence, but it is due to another business (such as a lawn care company), then select yes in 7 and select no for question 9 and select "561730 Landscaping Services" as the industry in Q10.

When the event involves maintenance or repair staff employed by the apartment complex, enter the industry in Q8 as "531110 Apartment building rental or leasing", and enter "Yes" for Q9. If the event involves maintenance or repair staff working in an apartment who operate their own business and are not employees of the apartment complex, then enter the industry in Q8 as "531110 Apartment building rental or leasing", answer "No" to Q9, and select the industry responsible in Q10 (i.e., "238220 Plumbing, Heating, and Air Conditioning Contractors" or "238350 Finish Carpentry Contractors").

In deciding which industry to list, it is still the facility as a whole, not a sub activity that is coded. For example, bulldozers involved in the installation of a water line uncover and break buried vials of hazardous substances at a fairground, and subsequently learned

that this location was formerly a military waste disposal area. Select “713990 All Other Amusement and Recreation Industries” as the industry for Q8, select “No” for Q9, and select “238910 Site Preparation Contractors” for Q10.

AREA/FACTORS

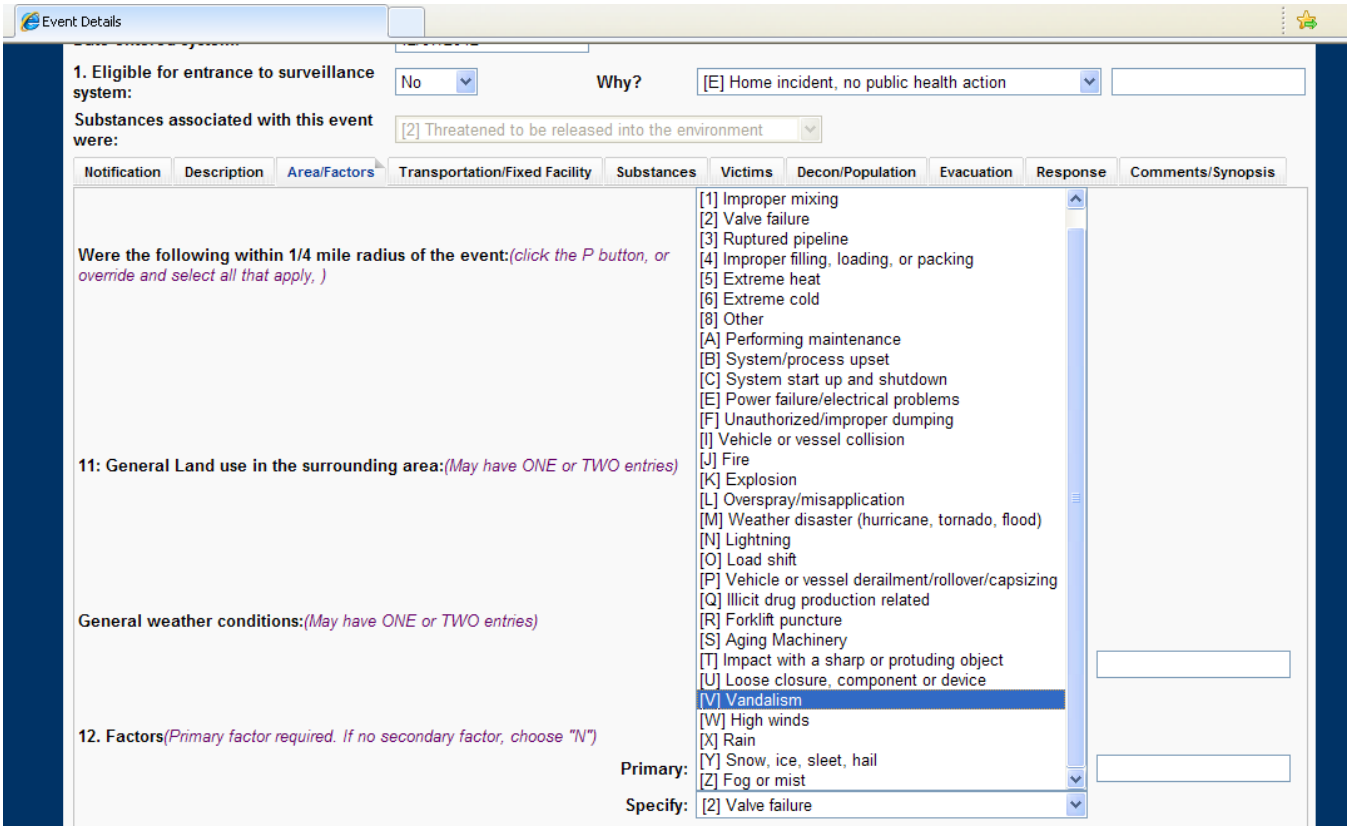


FIGURE 4. AREA/FACTORS TAB

Were any of the following within a ¼ mile of the event? Pressing the P button will automatically select the answer for you. You will need to press both P buttons. If you want to make a change to the automatically selected areas, check the override button and make your selections.

QUESTION 11: WHAT IS THE GENERAL LAND USE IN THE SURROUNDING AREA? (ONE OR TWO ENTRIES)

Intent: Determines the type of area in which the event occurred.

Instructions: Select one or two of the following in the General land use in the surrounding area field (Figure 4):

[0] Undeveloped area
[1] Industrial area
[2] Commercial area
[3] Residential area
[4] Agricultural area
[A] Military facility/DOE/DOD
[C] Recreational area

Note: For all codes, describe the immediate surrounding area of the facility, not the actual facility. For example, if a school is in a residential area, select Residential or if the school is in a commercial area, select Commercial.

Include areas such as an empty lot, cemetery, field, undeveloped land, marsh, swamp, or ocean as Undeveloped.

Include areas such as a civilian airport, office building, hospital, college, or university as Commercial if they are in a commercial type area.

Include areas such as an army base, nuclear reserve, or military airport as Military facility/DOE/DOD.

Include a spill onto a railway, rail yard, or roadway as the general area surrounding the railway, rail yard, or roadway.

Coastal/waterway events should map to one of the choices provided.

QUESTION 12: FACTORS CONTRIBUTING TO THE RELEASE

Intent: Determines the primary and secondary factors that contributed to the release.

Instructions: Select a primary and secondary factor in the Factors field (Figure 4):

Primary:
[2] Equipment failure
[3] Human error
[8] Other_____(15)
[G] Intentional
[H] Bad weather conditions/natural disasters
[S] Illegal act

Secondary:
[2] Equipment failure
[3] Human error
[8] Other_____(15)
[G] Intentional
[H] Bad weather conditions/natural disasters

[S] Illegal act
[N]= No secondary

There must always be a primary factor. If it is unknown, leave the field blank.

There is not necessarily a secondary factor. If there is no secondary factor, select option [N] No secondary factor. If it is unknown, leave the field blank.

If you select "Other" as the primary and/or secondary factor, you need to type a descriptive text (up to 15 alphanumeric characters) in the adjacent field(s).

Note: A primary factor is the initial cause of the release (what started it), and a secondary factor is the immediate cause of the release. Think of it as a "chain of events". There are only a handful of factors. You will get to describe them in more detail in the next part of the question.

Equipment failure is defined as failure of process or storage vessels, valves, pipes, pumps, or other equipment that allows the release of hazardous substances. Safety valves are intended to open to reduce dangerous pressure levels. Do not select Equipment failure if a hazardous substance is released when a safety valve operates as intended.

Human error is defined as a mistake made by a person resulting in a release of hazardous substances. Examples include leaving a valve open, failure to respond to process alarms, failure to maintain process variables or conditions at the set point, maintenance failures, inappropriate use of equipment, not following appropriate procedures such as lock-out or tag-out, removal of safety devices, misjudgment of conditions, inappropriate action resulting from faulty perception, mishandling accidents (e.g., dropping a vial), or mistakes such as pushing the wrong button, being distracted, and other similar actions.

An intentional act is when someone is willfully causing a release, e.g. sometimes a release is anticipated when performing maintenance, however, generally these are permitted, not illegal.

An illegal act is when someone is performing a willful act that is against the law, i.e. dumping, vandalism, pranks, terrorism, arson and stealing. Illegal act is not the only primary factor that can be chosen in meth production related incidents. For example, if the police mishandle evidence in a meth bust, the primary factor is Human error.

For severe weather conditions and earthquakes, wild fires, and other non-weather natural disasters select "H-Bad weather conditions/natural disasters".

For both the primary and secondary factor, you may specify the factor with a more descriptive term. Choose from the list, or if the list does not have the description needed, choose Other and type in a text description, up to 15 characters.

[1] Improper mixing
[2] Valve failure
[3] Ruptured pipeline
[4] Improper filling, loading, or packing
[5] Extreme heat
[6] Extreme cold
[8] Other _____(15)
[A] Performing maintenance
[B] System/process upset
[C] System start up and shutdown
[E] Power failure/electrical problems
[F] Unauthorized/improper dumping
[I] Vehicle or vessel collision
[J] Fire
[K] Explosion
[L] Overspray/misapplication
[M] Weather disaster (hurricane, tornado, flood)
[N] Lightning
[O] Loadshift
[P] Vehicle or vessel derailment/rollover/capsizing
[Q] Illicit drug production related
[R] Forklift puncture
[S] Aging machinery
[T] Impact with sharp/protruding object
[U] Loose closure, component, or device
[V] Vandalism
[W] High winds
[X] Rain
[Y] Snow, ice, sleet, hail
[Z] Fog or mist

Specify Meth events or any event that involves illegally produced drugs as illicit drug production related.

Specify a vehicle/vessel colliding with another vehicle or object as Vehicle or vessel collision.

Specify a vehicle/vessel mishap that does not involve a collision (e.g. derailment, rollover, or capsizing) as Vehicle/vessel derailment/rollover/capsizing.

Specify System/process upset when there is any glitch in the system that upsets the process, such as a chemical related problem or an upset due to a chemical reaction. The upset has to be specific to the facility.

Specify power outage, power failure, short in equipment, and problems with an electrical device (e.g., circuit breaker) as Power failure/electrical problems.

TRANSPORTATION/FIXED FACILITY

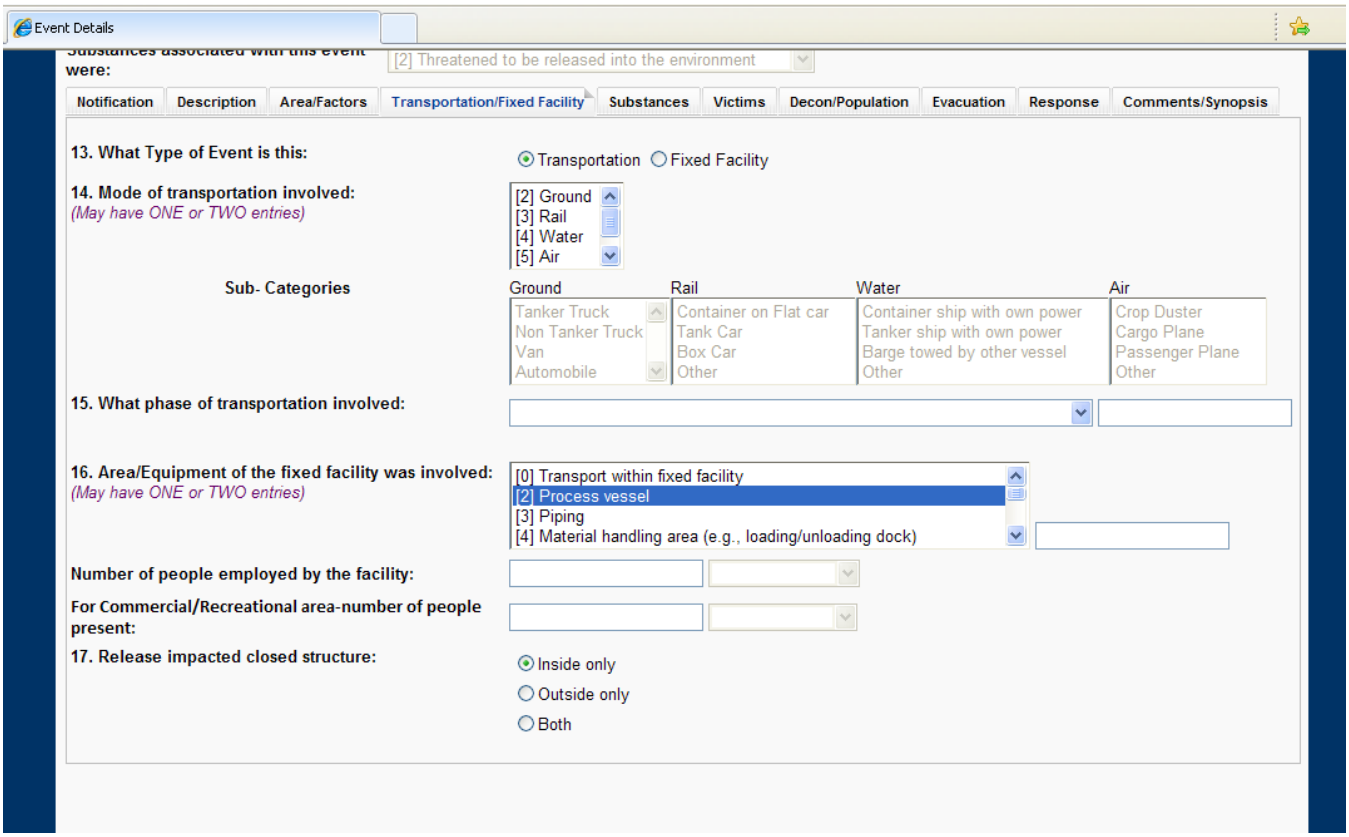


FIGURE 5. TRANSPORTATION/FIXED FACILITY TAB

QUESTION 13: WHAT TYPE OF EVENT WAS THIS?

Intent: Determines if this incident was a transportation event, as opposed to an event at a fixed facility.

Instructions: Select one of the following in the What type of event is this field (Figure 5):

[1] Transportation
[2] Fixed facility (go to #16)

Note: Make every attempt to answer this question because it is a critical analysis field.

If this is a fixed facility incidents, skip to Q16.

Transportation events include events involving hazardous materials being transported by ground transportation (e.g., trucks, vans, and automobiles), railroad, aircraft, boats, ships, and pipelines outside the boundaries of a fixed facility or in certain circumstances on fixed-facility property. Specifically, if the event occurs on a vehicle that brought a

substance to the facility or will carry it away from the facility, it is coded as a transportation event. For example, it is a transportation event if (1) a spill occurs along the route of a moving vehicle such as a truck or a train, but is not discovered until the vehicle reaches a destination or (2) a release is discovered in a truck that is stopped at a gas station or other location. If a substance was obviously spilled from a moving vehicle (e.g., the substance covered a large distance on the side of the road or barrels were lying in the road), it should be coded as transportation.

If an event is not clearly transportation, then code it as a fixed facility. Two examples of events that are fixed facility, but might not seem to be, are: (1) containers of chemicals found dumped in a field or hazardous substances found spilled on the ground, and (2) events involving vehicles that are part of the operation of the fixed-facility and occur within a fixed-facility are coded as fixed facility events (e.g., farm tractors, forklifts, and fixed-facility railroads, which are meant to move items within a fixed facility).

During loading and unloading of a vehicle that is carrying substances to or from a fixed facility (e.g., a cargo ship docked at port; a train at a depot, loading station, or rail yard; a truck at a loading dock; an airplane at an airport, etc.), an event is:

• transportation if the release occurs before all of the material has been unloaded from the vehicle

• fixed facility if the release occurs before all of the material has been totally loaded onto the vehicle

• fixed facility if the hazardous material was totally unloaded on a loading dock, conveyor belt, forklift, or other location that is part of the fixed facility before the spill occurred

The same guidelines apply to a small freight carrier, such as UPS or Federal Express. If leakage occurs while the package is on the vehicle, regardless of whether the vehicle is moving or stopped, code it as transportation. If leakage occurs while the package is off a vehicle that is transporting it to or from the fixed facility whether it is on a loading dock, conveyor belt, forklift, or in temporary storage, code the event as fixed facility.

If a release occurs when transferring chemicals from one railcar to another railcar and the railcars are used in a storage capacity, the event is coded as fixed facility. If the railcars are not being used in a storage capacity, then code the event as you would for loading/unloading of a vehicle as described above.

If a release occurs when unloading chemicals from a dock to a stationary barge, code this event as fixed facility.

If a release occurs when unloading chemicals from a stationary barge to a dock, code this event as fixed facility.

While a crop duster may be functioning as a part of the farm machinery when it is spraying the crops, it is transportation because it carried pesticides to the farm and has

not totally unloaded its product until it is done. In order to keep it consistent, all crop dusters in the air (not parked) will always be considered transportation.

Code spills from pipelines that commence and terminate within the same fixed facility as fixed-facility events.

QUESTION 14: WHAT MODE OF TRANSPORTATION WAS INVOLVED? (ONE OR TWO ENTRIES)

Intent: Determines the type of transportation involved in the event.

Instructions: Answer this question only if you selected Transportation for Question 13. Select up to two of the following in the Mode of transportation involved field (Figure 5). After an area/equipment is selected, a field will be available to further specify the area or equipment.

Mode	Specify
[2] Ground	Tanker truck, non-tanker truck, van, automobile, bus, other
[3] Rail	Container on flat car, tank car, box car, other
[4] Water	Container ship with own power, tanker ship with own power, barge towed by other vessel, other
[5] Air	Crop duster, cargo plane, passenger plane, other
[6] Pipeline	

Note: If the particular type of transport is unknown, leave the field blank.

QUESTION 15: WHAT PHASE OF TRANSPORTATION WAS INVOLVED?

Intent: Determines the phase of transportation involved in the event.

Instructions: Select one of the following in the What phase of transportation involved field (Figure 5)

[1] Occurred during unloading of a stationary vehicle or vessel
[2] From a moving vehicle or vessel
[3] En route that was later discovered at a fixed facility
[4] Occurred from a stationary vehicle or vessel (e.g. staged at a transfer)
[8] Other _____

If you select Other, you need to type a descriptive text (up to 15 alphanumeric characters) in the adjacent field.

Note: This question is only enabled if Transportation is chosen for Question 13.

QUESTION 16: WHAT AREA/EQUIPMENT OF THE FIXED FACILITY WAS INVOLVED IN THE EVENT?

Intent: Determines the specific location at the fixed facility where the event occurred and the equipment involved with the event.

Instructions: Select one or two of the following in the Area/Equipment of the fixed facility field involved (Figure 5). Use "OTHER" to describe the area better if desired.

[0] Transport within fixed facility
[2] Process vessel
[3] Piping
[4] Material handling area (e.g., loading/unloading dock)
[5] Storage area above ground (e.g., warehouse, tank, storage shed)
[6] Storage area below ground
[7] Dump/waste area (e.g., sewer)
[8] Other_____ (15)
[A] Ancillary process equipment
[B] Transformer and capacitor
[C] Incinerator
[D] Heating/cooling for building
[J] Laboratory

After an area/equipment is selected, the text box field will be available to further specify the area or equipment. If you select "Other," you must type a descriptive text (up to 15 alphanumeric characters) in the adjacent text box field.

Note: Do not use or combine any of the response options listed if you select Other. Instead, select the listed option(s).

Include moving hazardous substances within a fixed facility as Transport within fixed facility. Examples include moving farm vehicular equipment, the spill of materials due to containers falling off a moving forklift, events occurring on a roadway and railway within a fixed facility, and radiator associated with a vehicle. However, releases that occur on a vehicle carrying chemicals to or away from the fixed facility are excluded from this category.

Process vessel refers to a chemical reaction chamber where chemicals are processed such as a tank, reactor, distillation column, catalytic chamber, vat, or other piece of equipment in which substances are blended to form a mixture or are reacted to convert them to some other product or form. Do not select this option unless the process vessel is involved.

Include any type of lines, tubing, and piping as Piping. Also included are coupling joint, expansion joint, valve, flange, nipple, gasket, plugged drain and roof drain.

Include any material handling that result in a release, such as dropping a container, spilling its contents, or other manual or mechanical manipulation as Material handling area.

Include storage in sheds, warehouses, secondary containment structures, or vessels (e.g., a container, tank, drum, bottle, can, barrel, tank car, cylinder) used to hold a raw or input material, product, or byproduct at ambient conditions or at an elevated or reduced temperature or pressure as Storage area above ground or Storage area below ground, depending on where they are located.

Include locations currently used and recognized as dump/waste areas (e.g., waste sites at industrial facilities, municipal landfills, and sewers where wastewater is dumped) as Dump/waste area. Do not use this code for locations formerly used as dumps that have another use at the time of the event. For example, do not select this option for a former military or industrial hazardous chemical waste site that currently is a park, housing development, fairground, or other type of area. Do not include illegally dumped hazardous materials (e.g., barrels at rest stop).

Include any equipment besides the process vessel and piping that is used in the production of a product as Ancillary process equipment. The following (unless it is to heat or cool the building) is included: boiler, chiller, furnace, air conditioner, fan, evaporator, exchanger, filter, burner, flare, refrigerator, condenser, pollution control device, compressor, pump, non-vehicular radiator, vent, engine, generator, accumulator, instrument, meter, gauge, blower, recycling, and recovery. For example, a blast furnace for steel that acts as the actual vessel is a process vessel. If the furnace has a process vessel inside of it, it should be coded as ancillary process equipment.

Include boiler, furnace, air conditioning, fan, etc. if used to heat or cool the building as Heating/cooling for building.

Include school laboratories, commercial laboratories, but not illegal drug laboratories, as Laboratory.

QUESTION 17: DID THE RELEASE IMPACT

Intent: Determines whether the release impacted inside or outside of a building or other enclosed structure.

Instructions: Select one of the following for the Release impacted closed structure field (Figure 5)

[1] Inside a closed structure only
[2] Outside of a closed structure only
[3] Both inside and outside of a closed structure

Note: Include for a fixed facility or transportation event where the release occurred inside a structure but was vented outside as Outside a closed structure only. For example, if in

order to reduce emissions, hazardous gases are routinely burned in boilers located inside a building and the fire goes out which causes a release of hazardous gases to the outside environment through a chimney, ventilation pipe, or other means, select Outside a closed structure only because the release impacted outside the building.

Select both inside and outside of a closed structure if a large enough quantity got outside of the building and caused, or could have caused, a public health problem. Examples include (1) a fire that started inside of a building and moved to the outside or (2) a release starting outside and moved inside is if pesticides were sprayed outside and were sucked inside by a ventilation system.

SUBSTANCE(S)

Instructions: Click “Add new Substance” for each substance you want to add. Complete Questions 18-23 for each substance you add. Once you press ok, the substance name is automatically displayed in a row on the substance table. At the end of each row there is a to edit a substance’s information and to delete a substance.

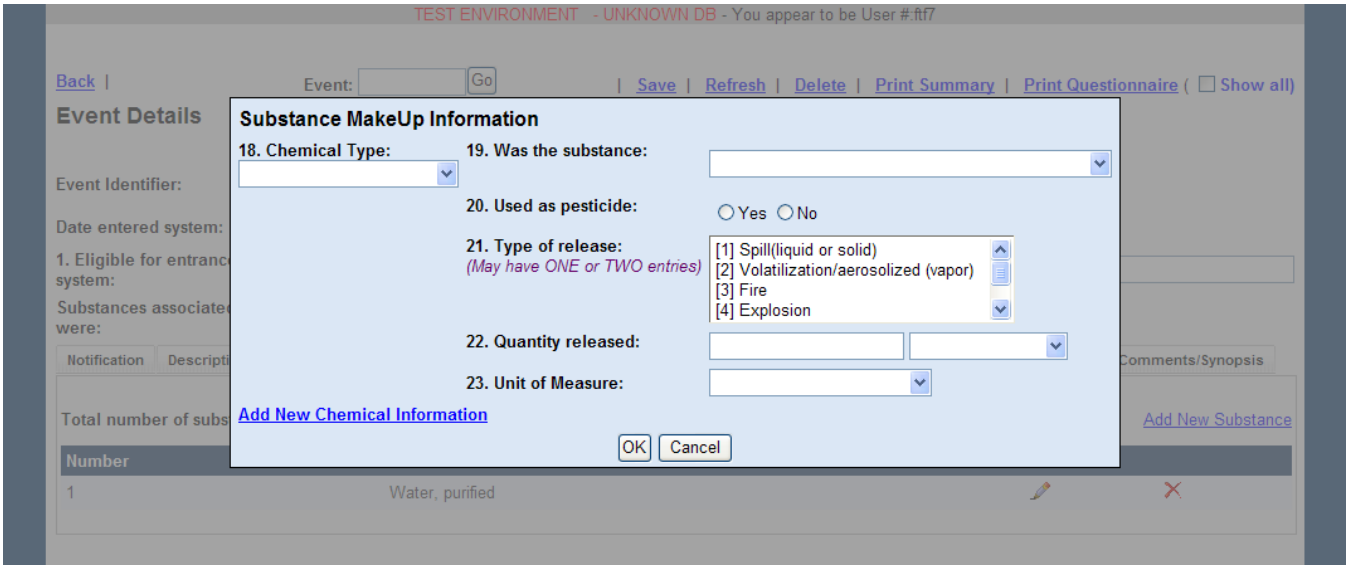


FIGURE 6. SUBSTANCE MAKEUP INFORMATION SCREEN

QUESTION 18: SUBSTANCE TYPE/NAME/INFORMATION

Intent: To properly format the substance being entered

Instructions: Choose from one of the following to indicate the type of substance you are about to enter.

[ ] Individual
[ ] Mixture-pick > 1 component
[ ] Reaction – pick reactants and product

Then you must click the button “Add new chemical information” in the bottom left hand corner of the Substance Makeup Information screen (Figure 6).. This will bring you to the Chemical Information Screen where you will identify the name of the substance.

Note: Individual substance is used if it is not a mixture or reaction.

Choose mixture when there is a combination of substances that are mixed together prior to being released An example of a mixture would be a large drum containing Benzene and Toluene that falls off a truck and breaks open. The components are Benzene and Toluene. Each component of the mixture will be selected separately from the pick-list in alphabetical order.

A chemical reaction is when two or more substances combine after being released to create one or more new substances. The reactants are those substances that were mixed together to create the chemical reaction, and the product is the resulting substance released from the chemical reaction, usually a gas. An example of a chemical reaction would be if sodium hypochlorite is accidentally mixed with hydrochloric acid and chlorine gas is released.

MAKEUP TYPE

Intent: To identify the substance parts.

Instructions: If you chose individual substance or mixture then [C] Component will automatically show for makeup type on the chemical information screen. If you chose reaction, then you will select from [R] reactant or [P] product for makeup type. In the above example of a chemical reaction you would select [R] for Sodium hypochlorite and for hydrochloric acid and [P] for chlorine gas. You will identify the substances involved and continue to hit the ok button after adding each component of a mixture or the parts of a reaction [R] or [P], until you have entered all of the parts.

Note: for a mixture you need to have at least two components.

NTSIP SUBSTANCE NAME IDENTIFICATION

Intent: Standardizing substance names in NTSIP is a major goal of the surveillance project because it allows for substance specific queries and analyses of the data.

Instructions: Begin with the Selected name field (referred to as the pick-list). As a substance name is typed in, if that substance name is on the pick-list, then you will "arrive" at that substance name on the list. You may have to scroll up and down to find the exact substance name you are looking for. Once you select a substance from the pick-list, all of the information for that substance will automatically populate the Chemical information screen. Press the OK button to save. You will be brought back to the Substance makeup information screen where the substance will be displayed on the bottom of the screen. (Figure 6) You will need to press Add New Chemical Information on the Substance makeup information screen more than once if you have a mixture or reaction. After you enter all components or the reactants and product, then you will press OK on the bottom of the substance makeup information screen to be brought back to the substance tab where there will be a number and the substance name listed. If your substance is a mixture or reaction, then only mixture or reaction will display. You will need to press Add new substance more than once on the substance tab if there is more than one substance in the incident. Each substance will get a number.

If the substance name does not match anything on the pick-list, you should chose **NO STANDARDIZED CHEMICAL FOUND**. The substance name must be entered manually in the Entered Name Field. You will need to press the "Check" button to get the entered name to save. Every effort should be made to find a valid match for the substance on the pick-list. Once an entered name is checked, "PENDING" will show for the standard name. This will remain until the substance gets identified and standardized.

Note: Information on substances can be found in many sources, including:

- *Farm Chemicals Handbook* (www.greenbook.net)
- Hawley's Chemical Dictionary
- Dictionary of Chemical Names and Synonyms
- RTECS
- Cross-Reference Index of Hazardous Chemicals, Synonyms, and CAS Registry Numbers
- *Tox./Occ. Med./Envl. Series of Tomes* (this contains RTECS and other databases)

Because many substances are often referred to by more than one unique name, identifying substances and deciding on one "standard" name for each substance is a challenge. One important tool in the NTSIP effort to standardize substance names is the substance pick-list that is incorporated into the NTSIP Data Entry Software. The purpose behind the substance pick-list is to facilitate the standardization of substance names in NTSIP. The NTSIP Data Entry Software does allow for the direct entry of a substance name, but every effort should be made to locate and pick the substance name or a synonym from the pick-list.

The substance names included in the pick-list are the result of an effort to standardize all previous substance names entered into NTSIP. The most common synonyms for substances are included on the pick-list. If a synonym is picked from the pick-list the entry is "mapped" to the appropriate NTSIP standard name.

You will notice that the pick-list includes some substance names ending in "NOS, meaning not otherwise specified" Use these ONLY when:

1. The information you have available suggests the likelihood that another (unnamed) hazardous substance(s) is present. Some common scenarios include
(a) a product for a specific purpose such as "lacquer thinner" or "contact cement", which often contains more than one hazardous chemical,

Acetic Acid (Film Fixer Solution)	==>	Acetic Acid NOS
Acetone (Paint Thinner)	==>	Acetone NOS
Tetrachloroethylene Adhesive	==>	Tetrachloroethylene NOS
Force 1000 (Silicone Product)	==>	Silicone NOS

(b) a substance is associated with words such as waste, wastewater, wash water, residue, leachate, sludge, etc. suggesting a possible waste "stew" of substances,

Acetonitrile Waste	==>	Acetonitrile NOS
Biological Sludge	==>	Biological Agent NOS
Benzene Sludge Residue	==>	Benzene NOS

(c) a mixture of a known substance and another substance that is mentioned but cannot be positively identified.

Cadmium and Other Chemical	==>	Cadmium NOS
Chlorine/9,9,8'-cis-bis-Blort	==>	Chlorine NOS
Isopropyl Acetate (Ink)	==>	Isopropyl Acetate NOS

2. The information is only sufficient to identify a class of hazardous substance.

Herbicide 203	==>	Pesticide NOS
Heavy Metals	==>	Metal NOS
Mercaptans	==>	Mercaptan NOS
Organic Compounds	==>	Organic NOS
Varnish	==>	Paint or Coating NOS
Paint Stripper	==>	Solvent NOS
Unknown Insecticide	==>	Pesticide NOS

3. The information is only sufficient to indicate that you have a compound of a certain element, possibly a specific type of compound (e.g., a sulfate versus a sulfide).

Phosphate Fertilizer Solution	==>	Phosphate NOS
Total Reduced Sulfides	==>	Sulfide NOS
Calcium Metal Salts	==>	Calcium NOS
Treated Ammoniated Copper	==>	Copper NOS

A substance name ending in “NOS” should only be selected when you have exhausted all means of trying to positively identify a substance. The use of these terms will be monitored on a state-by-state basis. You will notice that when you go to look for an NOS term, you may find more than one that is appropriate. For example, you can only determine the class of chemical such as vinyl resin. This could be placed in the “Resin NOS” category on the pick-list; however, a more specific category, Vinyl Resin NOS, is available. Vinyl Resin NOS is the term that should be selected. Be attentive to this issue, and scan the pick-list to ensure that you choose the most specific term.

Use "meth lab chemical, NOS" only when you have methamphetamine production chemicals that cannot be identified. If you know some of the chemicals, but not all, list those you know (e.g. ammonia, hydrochloric acid, ephedrine, solvent, NOS), and then list "meth lab chemical, NOS" as a separate entry. In most circumstances, methamphetamine (the final product) is not listed because it is not harmful when released to the environment.

SUBSTANCE NAMES WITH A CAS NUMBER ON THE PICK-LIST

Some substance names are followed by a CAS number in parentheses. Sometimes a chemical name is a synonym for two different unique chemicals (with unique CAS numbers). Before selecting one of these pick-list terms, confirm that both the name and the CAS number match.

RECORDING TRADE NAME PRODUCTS AND THEIR INGREDIENTS

When a trade named product is released, report its trade name, such as Extrazine, not its component ingredients (i.e., cyanazine and atrazine). Count the product as one chemical and report the amount released as the total quantity of the product, not the components. You may enter the major or active ingredients and the manufacturer’s name in the place for manufacturer.

Sometimes a trade name product and its active ingredient are released separately from different containers or vessels in the same event. In this case, you may list them as two separate chemicals. This would also apply to inert ingredients from the product.

Agricultural chemicals are often applied as ad hoc mixtures rather than as a product, such as Extrazine. For NTSIP purposes, mixtures consist of chemicals mixed

(combined) prior to release. For ad hoc mixtures of agricultural chemicals, follow the instructions for mixtures in the NTSIP Substance Identification Manual.

When a release occurs during the manufacturing of a product comprised of more than one hazardous chemical, list each substance released separately. Depending on when in the manufacturing process the release occurred, varying amounts of the ingredients and the final product may be present. Try to obtain information on whether the component ingredients and/or the final product were released. Do not record the product trade name if only the ingredients were released. For example, if alachlor and trifluralin were released early in the process of manufacturing Freedom, list alachlor and trifluralin separately, and do not list Freedom. List all three, if a quantity of the two ingredients and the final product were released.

GUIDANCE FOR SPECIFIC SUBSTANCES

This list of substances has been developed from guidance given by technical advisors about particular substances. After reading this list, if a particular substance that you are unsure of is not on this list or if the guidance on a particular substance is not clear, you may ask your technical advisor for guidance. This list may be updated periodically if new substance guidance is added or existing guidance is refined. Substances are listed alphabetically.

Asbestos: Include acute exposures to friable, respirable asbestos fibers, such as during demolition, renovation, or the explosion of an asbestos-containing steam pipe. Include exposures to items consisting primarily of asbestos, such as asbestos insulation, when respirable asbestos is suddenly released into the air. Exclude chronic exposures to asbestos. Exclude exposures to asbestos when the asbestos-containing item only partially consists of asbestos (i.e., the asbestos is embedded in other materials and makes up a relatively small proportion of the item), such as asbestos-containing ceiling or floor tile or roofing shingles. Contact your technical advisor if unsure whether a particular material qualifies.

Battery acid: Exclude if spilled in small amounts from a vehicle (such as small spills on driveways or on roads after a vehicular accident).

Biological Substances: Do not include water contaminated with fecal (coliform) bacteria or other microorganisms. Limit biological substances to terrorist events and to sudden, unexpected releases of pathogenic agents from containers during shipment, in laboratories, or in other circumstances.

Carbon Monoxide (CO):

- Include incidents in which there is a failure or malfunction of equipment at a commercial/industrial location or other business, including apartment buildings, that result in an emergency event meeting the NTSIP case definition.

- Do not include suicides from CO because once the source is shut off, only the person attempting suicide is exposed, and there is no clean up.
- Do not include incidents involving faulty heaters in homes because this was not the intent of CERCLA.
- Do not include incidents where the known concentration is less than 50ppm.

Creosote: Include creosote in NTSIP.

Cyclohexane: A petroleum product that is included in the NTSIP database because it is on the EPA's list of hazardous chemicals with reportable quantities.

Epoxies: Include in the NTSIP database.

Explosives: If an explosive, such as dynamite, is only hazardous when it combusts and there is no hazardous product before or after this combustion, it is not included in NTSIP. For example a stick of dynamite unearthed during construction would not be included, even if it was exploded to dispose of it, because there was no hazardous substance remaining to clean up.

Fats: These non-hazardous fats should not be included in NTSIP: beef tallow, butter, lard.

Freons: Do not include at quantities less than 100 pounds. Freons include:

Systematic name	Common/Trivial name(s), code
Trichlorofluoromethane	Freon-11, R-11, CFC-11
Dichlorodifluoromethane	Freon-12, R-12, CFC-12
Chlorotrifluoromethane	CFC
Chlorodifluoromethane	R-22, HCFC-22
Dichlorofluoromethane	R-21, HCFC-21
Chlorofluoromethane	Freon 31
Bromochlorodifluoromethane	BCF, Halon 1211 BCF, or Freon 12B1
1,1,2-Trichloro-1,2,2-Trifluoroethane	Trichlorotrifluoroethane, CFC-113
1,1,1-Trichloro-2,2,2-Trifluoroethane	CFC-113a
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	Dichlorotetrafluoroethane, CFC-114
1-Chloro-1,1,2,2,2-Pentafluoroethane	Chloropentafluoroethane, CFC-115
2-Chloro-1,1,1,2-Tetrafluoroethane	HFC-124
1,1-Dichloro-1-Fluoroethane	HCFC-141b
1-Chloro-1,1-Difluoroethane	HCFC-142b
Tetrachloro-1,2-Difluoroethane	CFC-112, R-112
Tetrachloro-1,1-Difluoroethane	R-112 a, CFC-112 a

1,1,2-Trichlorotrifluoroethane	R-113, CFC-113
1-Bromo-2-Chloro-1,1,2-Trifluoroethane	Halon-2311 a
2-Bromo-2-Chloro-1,1,1-Trifluoroethane	Halon 2311
1,1-Dichloro-2,2,3,3,3-Pentafluoropropane	R-22 5ca, HCFC-225 ca
1,3-Dichloro-1,2,2,3,3-Pentafluoropropane	HCFC 225 cb

Fumes: Technically, “fumes are small solid particles created by condensation from the gaseous state, generally after volatilization or by chemical reaction such as oxidation; they are usually submicronic in size.” Most fumes are metal oxides (cadmium oxide, lead oxide, iron oxide, zinc oxide, etc.). Include fumes in events that otherwise meet the NTSIP case definition (permitted releases of fumes, such as out stacks, or chronic releases would be excluded). The common usage definition of “fume” is “a smoke, vapor, or gas especially when irritating or offensive (e.g., gas fumes) or an often noxious suspension of particles in a gas, such as air.” Exclude fumes under the common definition unless a case-definition hazardous substance is identified.

Medical Materials: Medical waste consisting of hazardous substances or radioactive materials is <u>included</u> when the event meets the NTSIP case definition. (The case definition means an acute, emergency, uncontrolled or illegal release For example, an uncontrolled spill of a small quantity of a radioactive isotope in a clinic which required cleanup would be an event. Other medical waste (such as sharps, blood, gauze) are <u>excluded</u> from NTSIP.

Mercaptan: A petroleum product that is included in the NTSIP database because it is on the EPA’s list of hazardous chemicals with reportable quantities.

Odors: Substances only identified as “odors” should not be included in the NTSIP database.

Oils, non-petroleum: These non-hazardous, non-petroleum oils should not be included in NTSIP: coconut, cod liver, corn, cottonseed, linseed, olive, palm kernel, palm, peanut, soybean, tung, safflower and other vegetable oils.

Paint, Paint not otherwise specified (NOS), Paint or Coating NOS - for any of these substances do not include if the quantity is less than 100 gallons.

Pepper Spray: Deliberate exposure of individuals to pepper spray would be an event except when the exposure is legal such as by law enforcement officials or when used by an individual against an assailant, regardless of whether the use is legal.

Pesticides: Include all types of pesticides (i.e., insecticides, herbicides, fungicides, rodenticides, algaecides, miticides, etc.). If you have a pesticide trade name (e.g., Doom/Kill-A-Bug/Sucker Plucker/Drop Dead Fred), use the *Farm Chemicals Handbook (FCH)* to further identify the pesticide. Look in the "Sine" Index (yellow pages) for the trade mark name. Obtain the "common" name from either Section C (preferred) or

Section E of the *FCH*. When using Section C, select a common name adopted by ISO if available (it usually is). Otherwise, choose the ANSI or BSI "common" name, in that order.

Petroleum Products: Only include the following petroleum fuels if there is an injury or public health action.

- Gasoline/Gas (as slang for gasoline)
- Fuel oils/Heating oils. Note: A few exotic fuels (not fuel oils) are not petroleum based, such as hydrazine.
- Diesel fuels
- Kerosene/kerosene
- Lubricating oils, common grease, or hydraulic fluids that are petroleum based. Not all are; if in doubt or unknown, include available details (trade name, known components, etc.).
- Mineral oil or Mineral spirits
- Natural gas
- Propane
- LPG (liquefied petroleum gas) a mixture of butane (62%) and propane (38%).
- Butane
- Any of the various distillates/cuts/fractions/condensates/bottoms of petroleum, such as "light crude", as long as they have not been refined to the point of being one pure chemical. Note: substances that have been refined to the point of being one pure chemical, such as xylene, are included based on the amount spilled, whether or not there is an injury or public health action
- Any of the various naphtha, such as Ligroin (light naphtha)
- Petroleum ether
- Gas oil
- Jet fuels (JP-5, JP-7, etc. These are quite similar to kerosene.)
- Asphalt, petroleum coke, or other heavy or high-carbon petroleum cuts.
- Any other petroleum derivative that has not been refined to the point of being a single substance (e.g., crude oil).

Polychlorinated Biphenyls (PCBs): do not include if the concentration is less than 50ppm. Do not include if the quantity is less than 10 gallons.

Propylene glycol: do not include if the quantity is less than 50 gallons.

Resins: Include in the NTSIP database.

Sewer gas emissions, sewage spills, and manure gasses: Do not include in NTSIP database.

Sludge releases: Include in the NTSIP database only if the release is acute, not chronic, contains at least one identified hazardous substance, and meets the case definition.

Unknown substances: Do not include substances identified as simply **"**UNKNOWN SUBSTANCE**",** "fuel NOS," "other NOS," "other chemical NOS," or "environmentally hazardous solid NOS." At a minimum, a chemical category such as acid or pesticide would be needed or possibly an EPA waste code such as F001 or K004.

Water: You will almost never record the presence of water. For example, if a compound is listed as a compound solution (e.g., chlorine solution), then look for the compound itself (chlorine) on the pick-list. The presence of water will only be entered if it is involved in a water-reactive adverse chemical reaction.

PROVIDE IDENTIFICATION INFORMATION IF THE CHEMICAL IS NOT ON THE PICK-LIST

Intent: Determines the identity of the substance(s) involved in this event.

Instructions: Type the number in the CAS, DOT/UN, Manufacturer, and/ pick the Substance Category fields on the Chemical Information screen.

For the substance category - Select from the following

[1] Acids
[10] Other
[2] Ammonia
[3] Bases
[4] Chlorine
[5] Other inorganic substances
[6] Paints and dyes
[7] Pesticide/Agricultural
[8] PCB's
[9] VOC's
[A] Formulations
[B] Hetero-organics
[C] Hydrocarbons
[D] Oxy-organics
[E] Polymers

Note: These fields are only available if you entered a name in the Entered Name field instead of picking from the standard list. The purpose of the identification numbers is to provide a double-check on the name of the hazardous substance. The CAS number is the most widely used number. Provide these identification numbers only when you are sure about them (i.e., one or more of them were provided on the source data sheets.) If an ID number is not provided, the substance could easily be confused with another.

QUESTION 19: WAS THE SUBSTANCE ACTUALLY RELEASED INTO THE ENVIRONMENT OR THREATENED TO BE RELEASED INTO THE ENVIRONMENT?

Intent: Determines whether each specific substance involved in the event was actually released into the environment or threatened to be released.

Instructions: For each specific substance involved in the event, select one of the following in the Was the substance field (Figure 6):

[1] Actually released into the environment.
[2] Threatened to be released into the environment.

If you selected "Threatened to be released into the environment," Question 21 is automatically entered as "Not applicable,".

Note: Normally when an event involves the release of a hazardous substance and some of the same substance is not spilled, only the amount actually released is reported. However, there is one circumstance that is different. In events where a small amount is spilled and a public health action, such as an evacuation, is prompted by the substantially larger amount threatened to be released and not by the amount actually released, then enter both the released and the threatened amounts. Make two chemical entries for this event, one actually released and one threatened, using the pick-list in the normal fashion. There will be two rows in the substance table. It is not expected that this situation will arise very often.

Incidents where all the substance(s) are all only threatened, do not count as an incident. At least one substance must be actually released to qualify.

QUESTION 20: USED AS A PESTICIDE?

Intent: Indicates whether or not the substance is used as a pesticide.

Instructions: Select the Yes or No option in the Used as pesticide field (Figure 6). Leave the option blank if unknown.

[1] Yes
[2] No

Note: If the chemical is not classified as a pesticide, but was used as such, select "Yes".

Do not include sanitizing agents (ethylene oxide, water chlorinators)

QUESTION 21: TYPE OF RELEASE

Intent: Determines how the substance was released into the environment.

Instructions: Select one or two of the following in the Type of release field (Figure 6):

[1] Spill (liquid or solid)

[2] Volatilization/aerosolized (vapor)
[3] Fire
[4] Explosion
[5] Radiation
[7] Not applicable, threatened release

Note: Some chemicals held in the solid or liquid state will quickly vaporize (turn to gas) after being released in a spill. In an event where there was a spill of a solid or a liquid and vaporization occurred, select both Spill and Volatilization/aerosolized. If you are not sure if vaporization occurred, only select Spill. Only select Volatilization/aerosolized by itself for releases of gases with no involvement of solids or liquids.

It is understood that fires produce smoke, so this is not an air release. Choosing spill or air release with fire is situation-dependent. For example, spill should be chosen with fire if the spill happened first.

Include liquids, solids, and spills that originate from containers, drums, vials, batteries, etc. in Spill.

Not applicable, threatened release is automatically selected if you selected Threatened to be released into the environment.

QUESTION 22: QUANTITY RELEASED

Intent: Determines the amount of substance released into the environment.

Instructions: Type the amount (1 decimal place) of substance released in the Quantity released field (Figure 6). Do not enter units of measurement or commas. If the amount of the substance released is unknown, leave the field blank. If you enter an amount, the associated category is automatically selected in the field below. If you leave the field blank, select one of the following categories in the field below the amount.

[A] <1
[B] 1-<10
[C] 10-<100
[D] 100-<500
[E] 500-<1000
[F] 1000-<10,000
[G] 10,000 +

Note: For threatened chemicals, enter the amount threatened to be released.

Record the total amount spilled, regardless of how much was cleaned up.

QUESTION 23: UNIT OF MEASURE

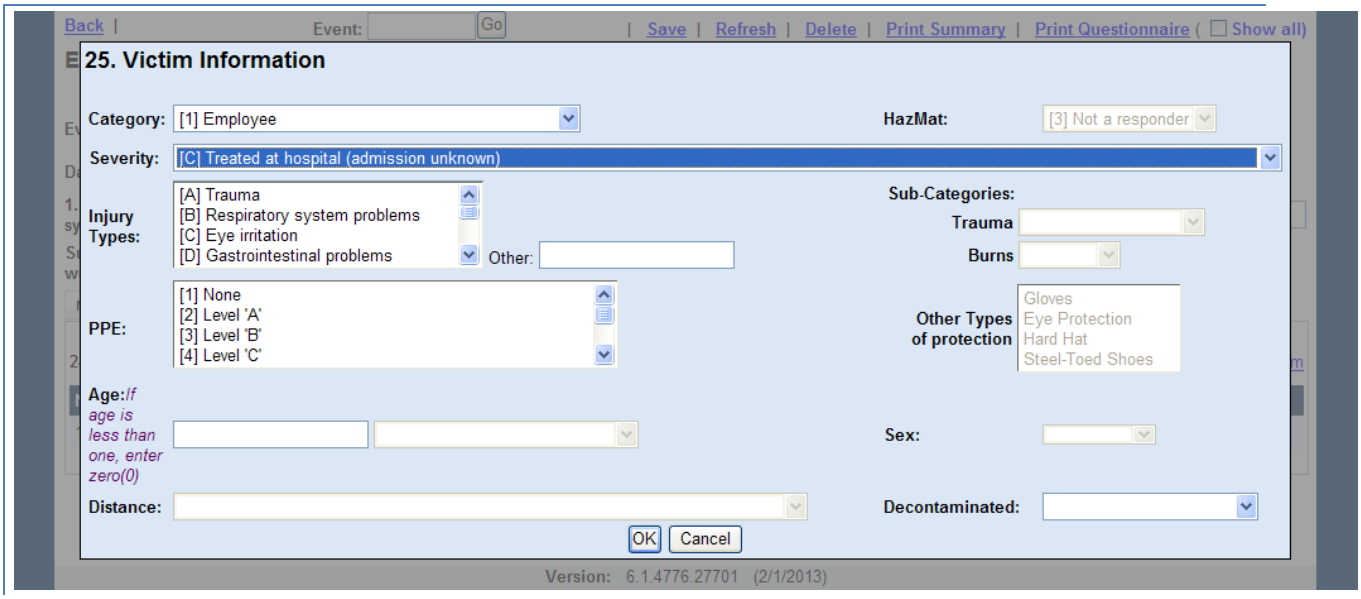
Intent: Determines the units in which the amount of substance released is measured. This is to complete the information recorded in Question 22.

Instructions: Select one of the following in the Unit of measure field (Figure 7):

[1] Pounds
[2] Kilograms
[3] Gallons
[4] Liters
[5] Cubic feet
[6] Ounces by volume
[7] Milliliters
[8] Picocuries
[A] Tons (metric)
[B] Ounces by weight
[C] PPM (parts per million)

VICTIMS

FIGURE 7: VICTIMS TAB



QUESTION 24: HOW MANY PEOPLE WERE INJURED IN THIS EVENT?

Intent: Determines the number of people injured as a result of the event.

Instructions: The People injured in this event field (Figure 8) is automatically updated as you add and delete victims. Each victim is automatically displayed in the Victims table. You will need to press the Add new Victim on the right hand of the screen to begin entering victim information. As with the substance table, the victim table will display a  to edit a victim's information and  to delete a victim.

Note: Enter only individuals with symptoms. More information concerning victims is entered in the fields on the Victim Information screen.

To be counted as a victim, an individual must report symptoms or go to a health care facility within 24 hours of the event for symptoms or injuries possibly associated with the event. The exception to the 24-hour stipulation is to count all victims who died as a result of the event as deaths, even if the death occurred much longer than 24 hours (even weeks) after the event, to the extent this information can be obtained.

Individuals with known injuries from an event who refuse treatment on the scene or at a hospital are also recorded as victims. Individuals meeting this description must have experienced injuries within 24 hours of the event and had their injuries reported by an official (e.g., fire department, EMS, police, poison control center).

QUESTION 25: COMPLETE ALL ITEMS (COLUMNS) FOR EACH VICTIM

Intent: Describes the victims associated with an event.

Instructions: See Questions 25A-G for specific instructions on each area of the Victims data. Once you click on add a victim, the victim information screen is displayed.

QUESTION 25A: CATEGORY OF VICTIM

Intent: To describe the victim by population group.

Instructions: Select one of the following in the Category field (Figure 7):

[1] Employee
[2] Responder (not specified)
[3] General Public
[A] Career Firefighter
[B] Volunteer Firefighter
[C] Firefighter (not specified)
[D] Police Officer
[E] EMS Personnel
[F] Hospital Personnel (e.g., doctor, nurse)
[G] Employee (member of company response team)

[H] Student (at school)
[I] 3rd Party Clean-up Contractor

Note: Select Employee only if the victim is an employee of the company where the event occurred. Count owners as employees.

If it is known that an employee was a member of the company response team, select [G] Employee (member of company response team).

Select General public for any person with known category of victim status who is not an employee of the company where the event happened, a responder or a student as described below. Select General public for employees of other companies. A member of the general public who is injured while helping to contain the spill or assisting an injured person is considered a victim and a member of the general public. Prisoners are members of the general public, whether or not the event occurred at the prison. People not employed or contracted by the facility/location where the event happened can't be classified as "employees". Count people injured during illegal activities (i.e., manufacturing methamphetamine) as general public.

A responder is a person whose job is to bring the release under control, provide medical assistance to victims, or conduct crowd control. Record the responder category when it is known (e.g., career firefighter, volunteer firefighter, firefighter unknown type, police officer, EMS personnel, hospital personnel, employee is member of company response team).

Any individual who was in the capacity of a student when the event occurred and the event occurred at the school is a Student. If students were in their dormitories at the time of the event, select General public.

QUESTION 25B: IS THE VICTIM A CERTIFIED HAZMAT TECHNICIAN?

Intent: Determines whether a responder had at least technician level HazMat training.

Instructions: If the option selected in Question 25A category of victim is not classified as a responder, the Not a Responder option is automatically selected. If you did select a responder category, then select one of the following in the HazMat field (Figure 7):

[1] Yes
[2] No

Note: If after asking whether the victim was a certified HazMat technician you are asked to clarify, then ask if they were certified at the technician level or above. Below are the OSHA levels of training for reference.

First responder awareness level - Individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. First responders at the

awareness level shall have sufficient training or have had sufficient experience to objectively demonstrate competency in the following areas:

• An understanding of what hazardous substances are and the risks associated with them in an incident.
• An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
• The ability to recognize the presence of hazardous substances in an emergency.
• The ability to identify the hazardous substances, if possible.
• An understanding of the role of the first responder awareness individual in the employer's emergency response plan, including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.
• The ability to realize the need for additional resources and to make appropriate notifications to the communication center.

First responder operations level - Individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures. First responders at the operational level shall have received at least 8 hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level and the employer shall so certify:

• Knowledge of the basic hazard and risk assessment techniques.
• Know how to select and use proper personal protective equipment provided to the first responder operational level.
• An understanding of basic hazardous materials terms.
• Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with their unit.
• Know how to implement basic decontamination procedures.
• An understanding of the relevant standard operating procedures and termination procedures.

Hazardous materials technician - Individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance. Hazardous materials technicians shall have received at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify:

• Know how to implement the employer's emergency response plan.

• Know the classification, identification and verification of known and unknown materials by using field survey instruments and equipment.
• Be able to function within an assigned role in the Incident Command System.
• Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.
• Understand hazard and risk assessment techniques.
• Be able to perform advance control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.
• Understand and implement decontamination procedures.
• Understand termination procedures.
• Understand basic chemical and toxicological terminology and behavior.

Hazardous materials specialist - Individuals who respond with and provide support to hazardous materials technicians. Their duties parallel those of the hazardous materials technician, however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The hazardous materials specialist would also act as the site liaison with Federal, state, local and other government authorities in regards to site activities. Hazardous materials specialists shall have received at least 24 hours of training equal to the technician level and in addition have competency in the following areas and the employer shall so certify:

• Know how to implement the local emergency response plan.
• Understand classification, identification and verification of known and unknown materials by using advanced survey instruments and equipment.
• Know the state emergency response plan.
• Be able to select and use proper specialized chemical personal protective equipment provided to the hazardous materials specialist.
• Understand in-depth hazard and risk techniques.
• Be able to perform specialized control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available.
• Be able to determine and implement decontamination procedures.
• Have the ability to develop a site safety and control plan.
• Understand chemical, radiological and toxicological terminology and behavior.

On scene incident commander - Incident commanders, who will assume control of the incident scene beyond the first responder awareness level, shall receive at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify:

• Know and be able to implement the employer's incident command system.
• Know how to implement the employer's emergency response plan.
• Know and understand the hazards and risks associated with employees working in chemical protective clothing.
• Know how to implement the local emergency response plan.

• Knowledge of the state emergency response plan and of the Federal Regional Response Team.
• Know and understand the importance of decontamination procedures.

QUESTION 25C: SEVERITY AND DISPOSITION OF VICTIM

Intent: Determines the severity of the victim's injury or injuries, and if and where care was provided.

Instructions: Select one of the following in the Severity field (Figure 7):

[2] Treated on scene (first aid)
[3] Treated at hospital (not admitted)
[4] Treated at hospital (admitted)
[5] Observation at hospital; no treatment
[6] Seen by private physician within 24 hours
[7] Adverse health effects experienced within 24 hours of event and reported by an official (e.g. Fire department, EMS, police, poison control center)
[8] Treated by mass casualty mobile unit
[A] Death on scene/on arrival at hospital
[B] Death after arrival at hospital
[C] Treated at hospital (admission unknown)

Note: Select the option that describes the most extensive type of treatment or disposition received by each victim.

If the victim is transported to a hospital or clinic and treated, but is not admitted for an overnight hospital stay, select the Treated at hospital (not admitted) option.

If the victim is transported to a hospital or clinic and treated, and is admitted as a patient for at least one overnight stay select Treated at hospital (admitted).

Select Observation at hospital; no treatment, if the victim is transported to a hospital or clinic for observation, evaluation, or diagnosis of their condition without receiving treatment for the condition. An example is monitoring the victim's blood pressure or heart rate without administering treatment. These victims may stay overnight in the emergency room, but not be admitted to the hospital. Please note this refers to injured persons. Do not list persons who had no injuries, but went to the hospital to get examined.

If victims did not go to a hospital or clinic but were seen by a physician within 24 hours, select Seen by private physician within 24 hours.

Injuries experienced within 24 hours of event and reported by an official (e.g., Fire department, EMS, police, poison control center) is for persons who were observed by an official to experience an injury, but were not treated at the scene or transported to a

health care facility. In order to include persons meeting this description, the injuries must be clearly reported and substantiated by an official.

Select Treated by mass casualty mobile unit for specialized teams of trained physicians dispatched to that location or nearby with equipment that can provide emergency care to victims similar to emergency room care.

QUESTION 25D: ADVERSE HEALTH EFFECTS

Intent: Determines the victim's injury.

Instructions: Select from at least one and up to seven of the following on the Injury Types field (Figure 7):

[A] Trauma (chose trauma cause)
[B] Respiratory system problems
[C] Eye irritation
[D] Gastrointestinal problems
[E] Heat stress
[F] Burns (choose burn type)
[H] Other
[I] Skin irritation
[J] Dizziness or other CNS symptoms
[L] Headache
[M] Heart problems
[N] Shortness of breath

If you select "Other," you need to type a descriptive text in the adjacent field.

For trauma, pick Chemical-Related, Not Chemical-Related, or Both.

For burn, pick Thermal, Chemical, or Both.

Note: Record all injuries. Mental symptoms such as stress or anxiety are not considered injuries for the purposes of this data collection. There must be a physical component such as chest pain, head ache, high blood pressure, etc. for it to be counted as an injury.

Include all injuries related to the "incident", not necessarily related to the :chemical", you will be able to distinguish if they are related to the chemical in your choices and in the comments in the end.

Trauma includes wounds and physical injuries. Examples of traumatic injuries include: abrasion, amputation, back pain, broken rib or other bone, fracture, bruise, contusion, cut, dislocation, ear drum puncture, knee injuries, laceration, puncture, musculoskeletal pain, scrapes, sprains, strain, whiplash, etc. If the substance involved caused the trauma, choose chemical-related. If the substance involved had nothing to do with the

trauma, select not chemical-related. If it cannot be determined whether the substance involved had anything to do with the trauma leave blank.

Include breathing problems/difficulties, chemical bronchitis, pneumonitis, chemical pneumonitis, cough, wheezing, sore throat, and throat irritation as Respiratory system problems. Include tightness of chest if it is related to asthma or other respiratory problem, and shortness of breath if it is definitely not cardiac-related.

Include runny eyes, tearing eyes, red eyes, and burning eyes as Eye irritation.

Gastrointestinal problems include nausea, vomiting, abdominal pain, heartburn, cramps, and diarrhea.

Include exposure to high temperatures accompanied by symptoms such as cramps, nausea, dizziness, stroke, muscle fatigue, exhaustion, dehydration, elevated blood pressure, heart palpitation or weakness as Heat stress.

Include exposure to fire, heat radiation, or electricity accompanied by symptoms such as tissue damage or blistering or redness of the skin, throat, eyes, or mouth as Thermal burn.

Include exposure to chemicals accompanied by symptoms such as tissue damage or blistering or redness of the skin, throat, eyes, or mouth as Chemical burn.

If you cannot determine what kind of burn it is leave it blank.

Include itchiness, redness, skin rash, stress rash, blister, and contact dermatitis as Skin irritation.

Include dizziness, fainting, passing out, lightheadedness, ataxia, numbness, tingling, and twitching as Dizziness or other CNS symptoms.

Include perceived internal pain, ache, or soreness originating in any part of the head excluding pain in teeth or ears, and superficial irritation of the skin or scalp as Headache.

Include cardiac arrest, heart attack, palpitation, chest pain/angina, and heart-related tightness of chest as Heart problems.

Shortness of breath is a separate category because it has two major causes: respiratory and cardiac. If the cause is known, select either respiratory or cardiac, and do not select shortness of breath. If the cause is unknown or it is not respiratory or cardiac-related (i.e., anxiety), select shortness of breath only.

If you select “Other,” record the type of injury experienced by the victim. Do not repeat or combine any of the response options already listed for this question.

QUESTION 25E: PERSONAL PROTECTIVE EQUIPMENT (PPE)

Intent: Determines if the victim was wearing personal protective equipment at the time of the event.

Instructions: Select one of the following in the PPE field (Figure11):

[1] None
[2] Level “A”
[3] Level “B”
[4] Level “C”
[5] Level “D”
6] Firefighter turn-out gear with respiratory protection
[A] Firefighter turn-out gear without respiratory protection
[B] Other types of protection

If you select [B] Other types of protection, then pick any or all of the following

- Gloves
- Eye protection
- Hard hat
- Steel-toed shoes

Note:

Level A Protection: (1) NIOSH/MSHA approved supplied-air respirator—pressure-demand, self-contained breathing apparatus (SCBA) or pressure-demand, airline respirator with escape bottle for Immediately Dangerous to Life and Health (IDLH) or potential for IDLH atmosphere; (2) fully encapsulating chemical-resistant suit; (3) chemical-resistant inner gloves; and (4) chemical-resistant boots with steel toe and shank. Optional PPE includes coveralls, long cotton underwear, hard hat, disposable gloves and boot covers, cooling unit, and 2-way radio.

Level B Protection: (1) NIOSH/MSHA approved supplied air respirator—pressure-demand, self-contained breathing apparatus or pressure-demand, airline respirator with escape bottle for IDLH or potential for IDLH atmosphere; (2) chemical-resistant clothing (overalls and long-sleeved jacket; hooded, one- or two-pieced chemical-splash suit; disposable chemical-resistant, one-piece suits); (3) chemical-resistant outer and inner gloves; and (4) chemical-resistant outer boots with steel toe and shank. Optional PPE includes long cotton underwear, coveralls, chemical-resistant (disposable) outer boot covers, hard hat with face shield, and intrinsically safe 2-way radio.

Level C Protection: (1) NIOSH/MSHA approved air-purifying, full-face, canister-equipped respirator; (2) chemical-resistant clothing (coveralls; hooded, one- or two-piece chemical splash suit; chemical-resistant hood and apron; disposable chemical-resistant coveralls); (2) chemical-resistant outer gloves; (3) chemical-resistant outer boots with steel toe and shank. Optional PPE includes coveralls, long cotton underwear, chemical-resistant inner

gloves, chemical-resistant (disposable) outer boot covers, hard hat with face shield, escape mask, and 2-way radio.

Level D Protection: (1) coveralls; (2) leather or chemical-resistant boots or shoes with steel and shank. Optional PPE includes gloves, safety glasses or chemical splash goggles, hard hat with face shield. (While Level D protection is primarily a work uniform, it is not any kind of work uniform. Level D uniforms must include the required PPE.)

In an event where no PPE information is available and you can reasonably assume that the person was not wearing PPE or only non-protective clothing select None. An example of such an event is a truck driver getting in an accident and being pinned, and no information about PPE is available.

Include protective foot gear, such as boots, as Other types of protection/Steel-toed boots.

QUESTION 25F: AGE OF VICTIM

Intent: Describes the exact or approximate age of the victim.

Instructions: Enter numeric age of victim (between 0 and 120) in the Age field (Figure 10). Leave the field blank if the age is unknown. The age category is automatically displayed in the adjacent field if you entered an age in the Age field (Figure10). If you did not enter an age in the Age field (Figure 10), select one of the following age categories on the adjacent field:

A. Child under 18 years old
B. Adult 18 years old or older

Note: Only if you are totally unsure, leave both blank

QUESTION 25G: DECONTAMINATION OF INJURED PERSON

Intent: Indicates where the victim was decontaminated

Instructions: Select either none or a decontamination location in the Decontaminated field (Figure 10):

[1] None
[2] At the scene
[3] At a medical facility
[4] Both

DECONTAMINATION / POPULATION AFFECTED

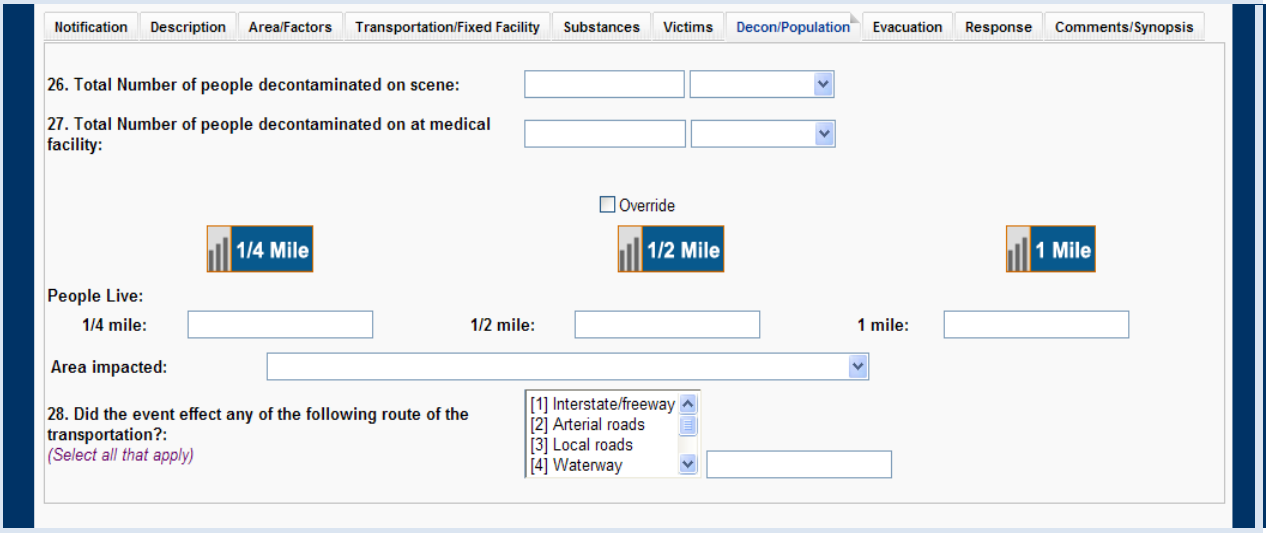


FIGURE 8: DECON/POPULATION TAB

QUESTION 26: TOTAL NUMBER OF PEOPLE DECONTAMINATED AT THE SCENE

QUESTION 27: TOTAL NUMBER OF PEOPLE DECONTAMINATED AT THE MEDICAL FACILITY

Intent: Determines the total number of people that were decontaminated at the scene of the event and at the hospital or other medical facility.

Instructions: Type the total number of people that were decontaminated (injured and uninjured) in the Total number of people decontaminated at scene field and Total number of people decontaminated at medical facility (Figure 8). The appropriate category will automatically fill in. If you do not know the exact number, leave it blank and choose from a category. If no individuals were decontaminated enter 0. If it is unknown whether any individuals were decontaminated, leave the field blank.

Category
0=0
1=1<5
2=5-20
3=21-50
4=51-100
5=101-500
6=501-1000
7=>1000

Note: These questions do not intend to determine the quality of the decontamination effort, just a count of the people decontaminated. An individual may be counted in both categories if they were decontaminated at both locations.

Decontamination means any cleaning procedure that is not considered routine. Washing hands or clothing is considered routine. Routine standard operating procedures for uncontaminated responders do not count. Irrigation of a wound or eye as part of treatment that does not require the responder to take any special precaution (e.g., put on extra layer gloves, call poison control for neutralization information, etc.) is not counted as decontamination.

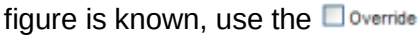
USE COMPUTER DEMOGRAPHICS BUTTON TO COMPLETE NUMBER OF PEOPLE LIVING IN A ¼, ½AND 1MILE RADIUS OF THE EVENT

Intent: Based on the address, determines the number of people that live within ¼ mile, ½ mile and 1 mile radius of the site of the event.

Instructions: Use the 

, 

and 

buttons to automatically enter data (Figure 8). If the number is unknown, leave the field blank. If you do not have latitude and longitude or a different figure is known, use the 

button to enter a figure.

Note: The number of people that live within ¼ mile must be smaller than the number of people that live within ½ mile and the number of people that live within ½ mile must be a smaller than the number of people that live within 1 mile.

If the latitude and longitude in question 6 are complete, the buttons automatically generate nearby population data based on the latest census for those coordinates. If you change the data in Question 6, you will be prompted to press the buttons again to update the population data.

QUESTION 28: DID THE EVENT AFFECT ANY OF THE FOLLOWING ROUTES OF TRANSPORTATION? (SELECT ALL THAT APPLY):

Intent: Determines if the event affected the transportation routes for any type of road system, railway, or waterway.

Instructions: Select as many of the following that apply as needed or select None in the Affected Roads field (Figure 8):

[1] Interstate/freeway
[2] Arterial roads
[3] Local roads
[4] Waterway
[5] Railroad/rail yard
[8] Other
[A] None

If you select "Other," you need to type a descriptive text (up to 15 alphanumeric characters) in the adjacent field.

Note: Affected means that the normal flow of traffic was altered.

EVACUATION AND IN-PLACE SHELTERING

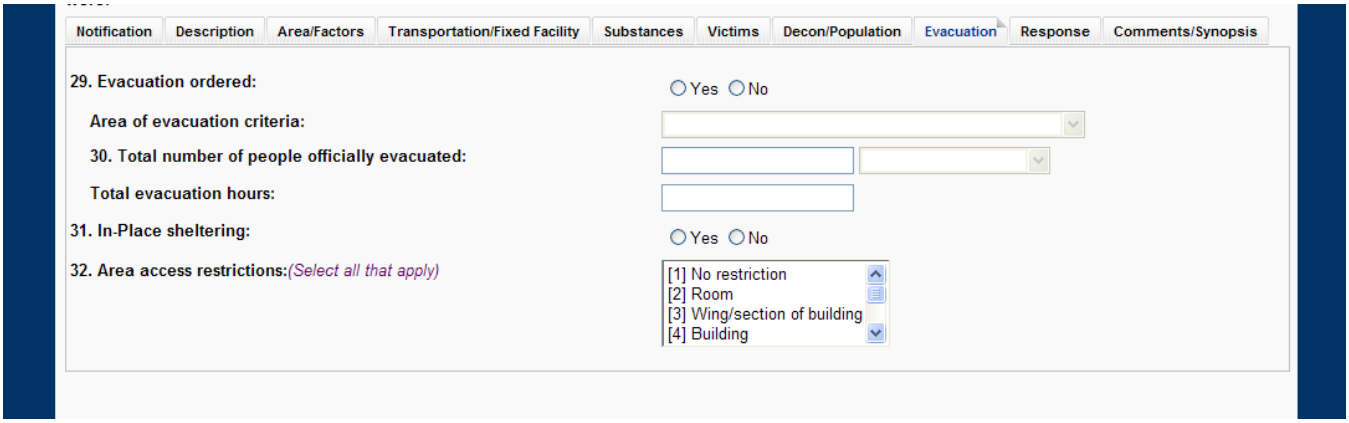


FIGURE 9: EVACUATION TAB

QUESTION 29: WAS THERE AN EVACUATION?

Intent: Determines whether an official ordered the evacuation of the area near the event or whether people had to evacuate for safety concerns prior to an official order.

Instructions: Select the Yes or No option in the Evacuation Order field (Figure 9). Leave the option blank if unknown. If you selected No, proceed to Question 31.

Note: An evacuation may be ordered by many types of officials. These include on-scene coordinators such as a fire or police chief, a member of a HazMat team, or a police officer. If this person orders an evacuation, then they should be considered official. Similarly, a teacher in a chemistry laboratory may be considered an official if they believe a situation warrants the immediate evacuation of students from the lab. Examples include (1) an alarm sounds after a chlorine release at an industrial facility, causing employees to go to a designated safe area or (2) fire officials order residents in a neighborhood to go to a distant designated safe area.

If a building is on fire or about to explode, or in other serious incidents where people have to flee on their own before an evacuation is ordered, count as yes.

When an event occurs before school starts for the day or before workers arrive at work, and the students/workers are told to stay home, count them, as appropriate, in Questions 27, but do not count them in Question 30. Only workers/students already at

work/school who had to evacuate are evacuees. However, for Question 32 you can record that access was restricted to the building.

QUESTION 30: WHAT IS THE TOTAL NUMBER OF PEOPLE WHO WERE EVACUATED AS A RESULT OF THE EVENT.

Intent: Determines the total number of people who were evacuated either by an official order or self-evacuated because of an urgent safety concern**.**

Instructions: Answer only if you selected Yes for Question 29. Type the number of people who were evacuated in the Total Number of people officially evacuated field (Figure 9). The category will automatically fill. If the number is unknown, leave the field blank and choose a category. If you are unable to choose a category, leave both blank.

Category
A= less than 5
B= 5-20
C = 21-50
D= 51-100
E= 101-500
F= 501- 1,000
G= Greater than 1,000

Note: Enter the total number of people who were evacuated from their homes, schools, place of business, or other areas as a result of the event. If any person was evacuated more than one time, count them only once.

QUESTION 31: DID AN OFFICIAL ORDER IN-PLACE SHELTERING?

Intent: Determines whether people were told to stay indoors and take precautions to prevent exposures associated with the event (e.g. shut down air conditioners, tape around doors and windows.).

Instructions: Select the Yes or No option in the In-Place sheltering field (Figure 9). Leave the option blank if unknown.

Note: If in-place sheltering is not mentioned in any of the documenting sources and it seems unlikely, select “No.

QUESTION 32: WAS ACCESS TO THE AREA RESTRICTED IN ANY WAY?

Intent: Indicates if normal access availability is altered in any way**.**

Instructions: Select as many of the following as needed or select No restriction in the Area access restriction field (Figure 9):

[1] No restriction

[2] Room
[3] Wing/section of building
[4] Building
[5] Facility
[6] Parking lot
[7] Access route/road
[8] Other adjacent areas

Note: If an event occurs before school starts for the day or before workers arrive at work and they are not allowed to enter the building, select Building.

RESPONSE

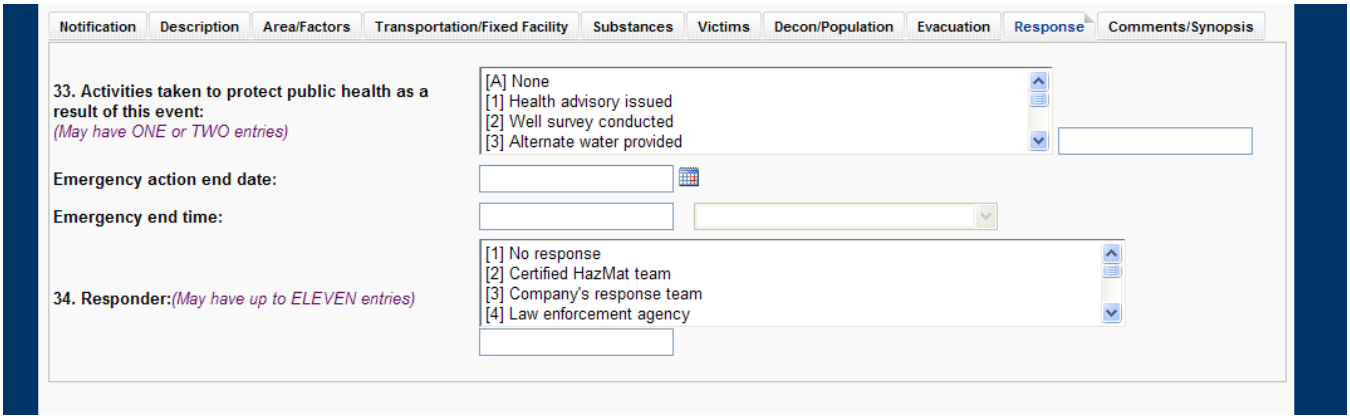


FIGURE 10. RESPONSE TAB

QUESTION 33: ACTIVITIES TAKEN TO PROTECT THE PUBLIC HEALTH AS A RESULT OF THIS EVENT? (CHOOSE ONE OR TWO)

Intent: Determines the activities initiated to protect the public from exposures to substances released during the event.

Instructions: Select one or two of the following in the Activities initiated field (Figure 10):

[1] Health advisory issued
[2] Well survey conducted
[3] Alternate water provided
[4] Fishing and/or water recreation ban
[5] Discourage/prohibit consumption of locally grown produce and livestock
[6] Health investigation
[7] Environmental sampling
[8] Other_____(15)
[9] Shutdown of water intakes
[10] None

If you select “Other,” you will need to type a descriptive text in the adjacent field.

Note: The Well survey conducted option refers to both surveys of who has and uses a well and to testing for contamination of well water.

QUESTION 34: WHO RESPONDED TO THIS INCIDENT?

Intent: Indicates the personnel that responded to the event.

Instructions: Select all of the following in the Responder field (Figure 10) that apply:

[1] No response
[2] Certified HazMat team
[3] Company's response team
[4] Law enforcement agency
[5] Fire department
[6] EMS
[8] Other
[A] Health department/health agency
[B] Environmental agency/EPA response team
[C] 3rd Party Clean-up Contractor
[D] Specialized multiagency team
[E] Department of works/utilities/transportation (includes coast guard)
[F] State, County, or Local Emergency managers/coordinators/planning committees
[G] Hospital
[H] Poison Center
[J] ACE team

If you select "Other," you will need to type a descriptive text in the adjacent field.

Note: This is first responders, not later clean-up. Select Hospital personnel only if the personnel were at the event. Hospital personnel at a hospital or emergency room are not considered at the event.

COMMENTS/SYNOPSIS

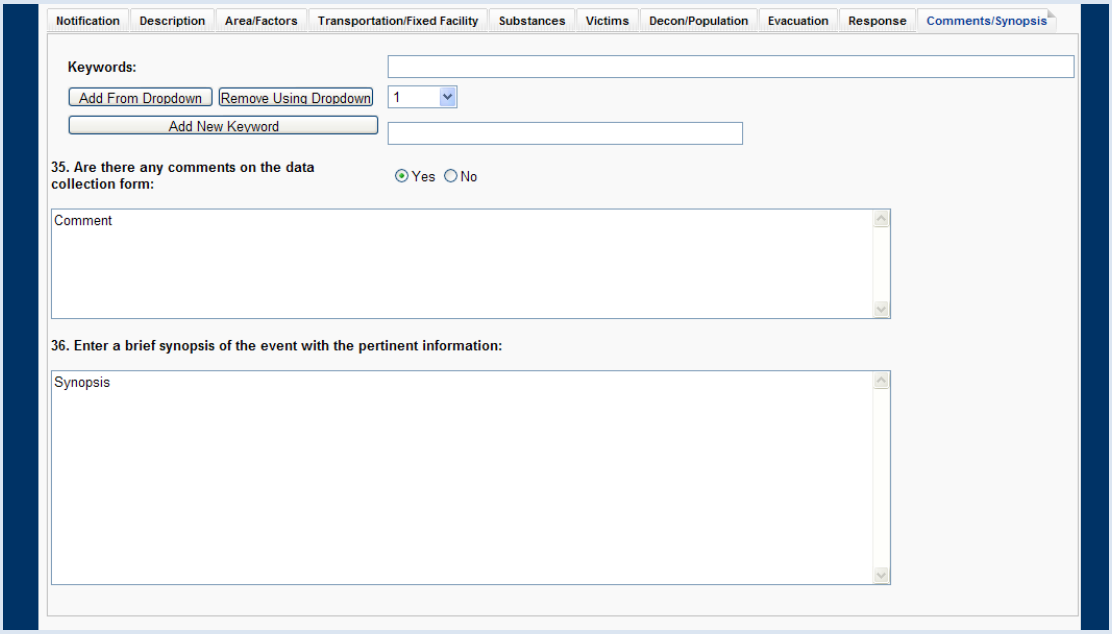


FIGURE 11. COMMENTS/SYNOPSIS TAB

QUESTION 35: ARE THERE ANY COMMENTS ON THE DATA COLLECTION FORM?

Intent: Determines if comments on specific aspects of the data collection form were made.

Instructions: Select the Yes or No option in the Comments on form field (Figure 11).

If yes, type comments in text field.

Note: Include the corresponding question number when the comments concern a particular question. Include any information that was not entered into the database but may be helpful at a later date.

QUESTION 36: ENTER A BRIEF SYNOPSIS OF THE EVENT WITH PERTINENT INFORMATION

Intent: To facilitate a better, succinct understanding of the event

Instructions: A brief synopsis is a required field. Start out with a description of where it happened. Do not include non-standard abbreviations or detailed information that is captured in other areas of the Data Collection form.

Note: This field is required to save the event as complete. Limit 400 characters. User is unable to use special characters in this text field.

APPENDIX I: NTSIP ANY QUANTITY REPORTING LIST

1- Pentene
1,1-Dimethyl hydrazine
1,2-Ethanediamine
1,3 Butadiene
1,3-Bis(2-chloroethylthio)-npropane
1,3-Butadiene
1,3-Pentadiene
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha.,4.alpha.,4a.beta.,5.alpha.,8.alpha.,8a.beta.)-
1,4-Bis(2-chloroethylthio)-nbutane
1,5-Bis(2-chloroethylthio)-npentane
1-Butene
1-Chloropropylene
1H-Tetrazole
2,2'-Bioxirane
2,2-Dimethylpropane
2,4-Dithiobiuret
2-Butenal
2-Butenal, (e)-
2-Butene
2-Butene-cis
2-Butene-trans
2-Chloro-N-(2-chloroethyl)-N-methylethanamine
2-Chloropropylene
2-Methyl-1-butene
2-Methyllactonitrile
2-Methylpropene
2-Pentene, (E)-
2-Pentene, (Z)-
2-Propen-1-amine
2-Propen-1-ol
2-Propenal
2-Propenenitrile
2-Propenenitrile, 2-methyl-
2-Propenoyl chloride
3-Chloropropionitrile
3-Methyl-1-butene
4,6-Dinitro-o-cresol
4,7-Methanoindan, 1,2,3,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
4-Aminopyridine
5-(Aminomethyl)-3-isoxazolol
5-Fluorouracil

Acetaldehyde
Acetic acid ethenyl ester
Acetone
Acetone cyanohydrin
Acetone thiosemicarbazide
Acetyl bromide
Acetyl chloride
Acetyl iodide
Acetylene
Acrolein
Acrylamide
Acrylonitrile
Acrylyl chloride
Adiponitrile
Aldicarb
Aldrin
Allyl alcohol
Allylamine
Allyltrichlorosilane, stabilized
Aluminum (powder)
Aluminum bromide, anhydrous
Aluminum chloride, anhydrous
Aluminum phosphide
Aminopterin
Amiton
Amiton oxalate
Ammonia
Ammonia (anhydrous)
Ammonium nitrate, [with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance]
Ammonium nitrate, solid [nitrogen concentration of 23% nitrogen or greater]
Ammonium perchlorate
Ammonium picrate
Amphetamine
Amyltrichlorosilane
Aniline
Aniline, 2,4,6-trimethyl-
Antimony pentafluoride
Antimycin A
ANTU
Arsenic pentoxide
Arsenic trioxide
Arsenous oxide
Arsenous trichloride
Arsine

Azinphos-ethyl
Azinphos-methyl
Aziridine
Aziridine, 2-methyl
Barium azide
Benzal chloride
Benzenamine, 3-(trifluoromethyl)-
Benzene
Benzene, 1-(chloromethyl)-4-nitro-
Benzene, 1,3-diisocyanato-2-methyl-
Benzene, 2,4-diisocyanato-1-methyl-
Benzenearsonic acid
Benzenethiol
Benzimidazole, 4,5-dichloro-2-(trifluoromethyl)-
Benzoic trichloride
Benzotrichloride
Benzyl chloride
Benzyl cyanide
beta-Propiolactone
Bicyclo[2.2.1]heptane-2-carbonitrile, 5-chloro-6-((((methylamino)carbonyl)oxy)imino)-,(1-alpha,2-beta,4-alpha,5-alpha,6E))-
Bis(2-chloroethyl) ether
Bis(2-chloroethylthio)methane
Bis(2-chloroethylthiomethyl)ether
Bis(chloromethyl) ether
Bis(chloromethyl) ketone
Bitoscanate
Borane, trichloro-
Borane, trifluoro-
Boron tribromide
Boron trichloride
Boron trifluoride
Boron trifluoride compound with methyl ether (1:1)
Boron, trifluoro[oxybis[methane]]-, (T-4)-
Bromadiolone
Bromine
Bromine chloride
Bromine pentafluoride
Bromine trifluoride
Bromomethane
Bromotrifluorethylene
Butane
Butene
Butyltrichlorosilane
Cadmium oxide

Cadmium stearate
Calcium arsenate
Calcium hydrosulfite
Calcium phosphide
Camphechlor
Camphene, octachloro-
Cantharidin
Carbachol chloride
Carbamic acid, methyl-, O-(((2,4-dimethyl-1,3-dithiolan-2-yl)methylene)amino)-
Carbofuran
Carbon disulfide
Carbon monoxide (above 50ppm)
Carbon oxysulfide
Carbonic dichloride
Carbonochloridic acid, 1-methylethyl ester
Carbonochloridic acid, methylester
Carbonochloridic acid, propylester
Carbonyl fluoride
Carbonyl sulfide
Carbophenothion
Chlordane
Chlorfenvinfos
Chlorine
Chlorine dioxide
Chlormephos
Chlormequat chloride
Chloroacetic acid
Chloroethanol
Chloroethyl chloroformate
Chloroform
Chloromethyl ether
Chloromethyl methyl ether
Chlorophacinone
Chlorosarin
Chlorosoman
Chlorosulfonic acid
Chloroxuron
Chlorthiophos
Chromic chloride
Chromium oxychloride
Cobalt carbonyl
Cobalt, ((2,2'-(1,2-ethanediylbis(nitrilomethylidyne))bis(6-fluorophenylato))(2-)-N,N',O,O')-
Colchicine
Coumaphos

Coumatetralyl
Crimidine
Crotonaldehyde
Crotonaldehyde, (E)-
Cupric acetoarsenite
Cyanogen
Cyanogen bromide
Cyanogen chloride
Cyanogen iodide
Cyanophos
Cyanuric fluoride
Cyclohexanamine
Cyclohexane, 1,2,3,4,5,6-hexachloro-
,(1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-
Cycloheximide
Cyclohexylamine
Cyclohexyltrichlorosilane
Cyclopropane
Decaborane(14)
Demeton
Demeton-S-methyl
DF
Dialifor
Diazodinitrophenol
Diborane
Diborane(6)
Dichloroethyl ether
Dichloromethyl ether
Dichloromethylphenylsilane
Dichlorophenylarsine
Dichlorosilane
Dichlorvos
Dicrotophos
Diepoxybutane
Diethyl chlorophosphate
Diethyl methylphosphonite
Diethyldichlorosilane
Diethyleneglycol dinitrate
Difluoroethane
Digitoxin
Diglycidyl ether
Digoxin
Diisopropylfluorophosphate
Dimefox
Dimethoate

Dimethyl chlorothiophosphate
Dimethyl phosphorochloridothioate
Dimethyl sulfate
Dimethylamine
Dimethyldichlorosilane
Dimethyldichlorosilane
Dimethylhydrazine
Dimethyl-p-phenylenediamine
Dimetilan
Dingu
Dinitrobutyl phenol
Dinitrocresol
Dinitrogen tetroxide
Dinitrophenol
Dinitroresorcinol
Dinoseb
Dinoterb
Dioxathion
Diphacinone
Diphenyldichlorosilane
Diphosphoramide, octamethyl-
Dipicryl sulfide
Dipicrylamine [or] Hexyl
Disulfoton
Dithiazanine iodide
Dithiobiuret
Dodecyltrichlorosilane
Emetine, dihydrochloride
Endosulfan
Endothion
Endrin
Epichlorohydrin
EPN
Ergocalciferol
Ergotamine tartrate
Ethane
Ethane, 1,1'-thiobis[2-chloro-
Ethaneperoxoic acid
Ethanesulfonyl chloride, 2-chloro-
Ethanimidothioic acid, N-[[methylamino)carbonyl]
Ethanol, 1,2-dichloro-, acetate
Ethion
Ethoprop
Ethoprophos
Ethyl acetylene

Ethyl chloride
Ethyl cyanide
Ethyl ether
Ethyl mercaptan
Ethyl nitrite
Ethyl phosphonyl difluoride
Ethylamine
Ethylbis(2-chloroethyl)amine
Ethyldiethanolamine
Ethylene
Ethylene dibromide
Ethylene fluorohydrin
Ethylene oxide
Ethylenediamine
Ethyleneimine
Ethylphosphonothioic dichloride
Ethylthiocyanate
Ethyltrichlorosilane
Fenamiphos
Fensulfothion
Fluenetil
Fluorine
Fluoroacetamide
Fluoroacetic acid
Fluoroacetic acid, sodium salt
Fluoroacetyl chloride
Fluorosulfonic acid
Fluorouracil
Fonofos
Formaldehyde
Formaldehyde (solution)
Formaldehyde cyanohydrin
Formetanate hydrochloride
Formothion
Formparanate
Fosthietan
Fuberidazole
Furan
Gallium trichloride
Germane
Germanium tetrafluoride
Guanyl nitrosaminoguanylidene hydrazine
Guthion
Hexachlorocyclohexane (gamma isomer)
Hexachlorocyclopentadiene

Hexaethyl tetraphosphate and compressed gas mixtures
Hexafluoroacetone
Hexamethylenediamine, N,N'-dibutyl-
Hexanitrostilbene
Hexolite
Hexyltrichlorosilane
HMX
HN1 (nitrogen mustard-1)
HN2 (nitrogen mustard-2)
HN3 (nitrogen mustard-3)
Hydrazine
Hydrazine, 1,1-dimethyl-
Hydrazine, methyl-
Hydrocyanic acid
Hydrofluoric acid
Hydrofluoric acid (conc. 50% or greater)
Hydrogen
Hydrogen bromide
Hydrogen chloride (anhydrous)
Hydrogen chloride (gas only)
Hydrogen cyanide
Hydrogen fluoride
Hydrogen fluoride (anhydrous)
Hydrogen peroxide (Conc.> 52%)
Hydrogen peroxide (concentration of at least 35%)
Hydrogen selenide
Hydrogen sulfide
Hydroquinone
Iodine pentafluoride
Iron carbonyl (Fe(CO)5), (TB-5-11)-
Iron, pentacarbonyl-
Isobenzan
Isobutane
Isobutyronitrile
Isocyanic acid, 3,4-dichlorophenyl ester
Isodrin
Isofluorphate
Isopentane
Isophorone diisocyanate
Isoprene
Isopropyl chloride
Isopropyl chloroformate
Isopropylamine
Isopropylmethylpyrazolyl dimethylcarbamate
Isopropylphosphonothioic dichloride

Isopropylphosphonyl difluoride
Isothiocyanatomethane
Lactonitrile
Lead azide
Lead styphnate
Leptophos
Lewisite
Lewisite 1
Lewisite 2
Lewisite 3
Lindane
Lithium amide
Lithium hydride
Lithium nitride
Magnesium (powder)
Magnesium diamide
Magnesium phosphide
Malononitrile
Manganese, tricarbonyl methylcyclopentadienyl
MDEA
Mechlorethamine
Mephosfolan
Mercaptodimethur
Mercuric acetate
Mercuric chloride
Mercuric oxide
Mercury
Mercury fulminate
Methacrolein diacetate
Methacrylic anhydride
Methacrylonitrile
Methacryloyl chloride
Methacryloyloxyethyl isocyanate
Methamidophos
Methanamine, N-methyl-N-nitroso-
Methane
Methane, chloromethoxy-
Methane, isocyanato-
Methane, oxybis[chloro-
Methane, tetranitro-
Methane, trichloro-
Methanesulfenyl chloride, trichloro-
Methanesulfonyl fluoride
Methanethiol
Methidathion

Methiocarb
Methomyl
Methoxyethylmercuric acetate
Methyl 2-chloroacrylate
Methyl bromide
Methyl chloride
Methyl chlorocarbonate
Methyl chloroformate
Methyl ether
Methyl formate
Methyl hydrazine
Methyl isocyanate
Methyl isothiocyanate
Methyl mercaptan
Methyl parathion
Methyl phenkapton
Methyl phosphonic dichloride
Methyl thiocyanate
Methyl vinyl ketone
Methylamine
Methylchlorosilane
Methyldichlorosilane
Methylmercuric dicyanamide
Methylphenyldichlorosilane
Methylphosphonothioic dichloride
Methyltrichlorosilane
Metolcarb
Mevinphos
Mexacarbate
Mitomycin C
Monocrotophos
Muscimol
Mustard gas
N,N-(2-diethylamino)ethanethiol
N,N-(2-diisopropylamino)ethanethiol N,N-diisopropyl-(beta)-aminoethane thiol
N,N-(2-dimethylamino)ethanethiol
N,N-(2-dipropylamino)ethanethiol
N,N-Diethyl phosphoramidic dichloride
N,N-Diisopropyl phosphoramidic dichloride
N,N-Dimethyl phosphoramidic dichloride Dimethylphosphoramidodichloridate
N,N-Dipropyl phosphoramidic dichloride
Nickel carbonyl
Nicotine
Nicotine sulfate
Nitric acid

Nitric acid (conc 80% or greater)
Nitric oxide
Nitrobenzene
Nitrocellulose
Nitrocyclohexane
Nitrogen dioxide
Nitrogen mustard
Nitrogen mustard hydrochloride
Nitrogen oxide (NO)
Nitrogen trioxide
Nitroglycerine
Nitromannite
Nitromethane
Nitrosodimethylamine
Nitrostarch
Nitrosyl chloride
Nitrotriazolone
N-Nitrosodimethylamine
Nonyltrichlorosilane
Norbormide
O,O-Diethyl O-pyrazinyl phosphorothioate
o,o-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate
o-Cresol
Octadecyltrichlorosilane
Octolite
Octonal
Octyltrichlorosilane
Oleum (Fuming Sulfuric acid)
O-Mustard (T)
Organorhodium Complex (PMN-82-147)
Ouabain
Oxamyl
Oxetane, 3,3-bis(chloromethyl)-
Oxirane
Oxirane, (chloromethyl)-
Oxirane, methyl-
Oxydisulfoton
Oxygen difluoride
Ozone
Paraquat dichloride
Paraquat methosulfate
Parathion
Parathion-methyl
Paris green
Pentaborane

Pentadecylamine
Pentane
Pentolite
Peracetic acid
Perchloromethyl mercaptan
Perchloryl fluoride
Perfluoroisobutylene
PETN
Phenol
Phenol, 2,2'-thiobis[4-chloro-6-methyl-
Phenol, 3-(1-methylethyl)-, methylcarbamate
Phenoxarsine, 10,10'-oxydi-
Phenyl dichloroarsine
Phenylhydrazine hydrochloride
Phenylmercuric acetate
Phenylmercury acetate
Phenylsilatrane
Phenylthiourea
Phenyltrichlorosilane
Phorate
Phosacetim
Phosfolan
Phosgene
Phosphamidon
Phosphine
Phosphonothioic acid, methyl-, O-(4-nitrophenyl) O-phenyl ester
Phosphonothioic acid, methyl-, O-ethyl O-(4-(methylthio)phenyl) ester
Phosphonothioic acid, methyl-, S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester
Phosphoric acid, 2-dichloroethenyl dimethyl ester
Phosphoric acid, dimethyl 4-(methylthio) phenyl ester
Phosphorodithioic acid O-ethyl S,S-dipropyl ester
Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
Phosphorothioic acid, O,O-dimethyl-5-(2-(methylthio)ethyl)ester
Phosphorous trichloride
Phosphorus
Phosphorus (yellow or white)
Phosphorus oxychloride
Phosphorus pentabromide
Phosphorus pentachloride
Phosphorus pentasulfide
Phosphorus trichloride
Phosphoryl chloride
Physostigmine
Physostigmine, salicylate (1:1)
Picrite

Picrotoxin
Piperidine
Pirimifos-ethyl
Plumbane, tetramethyl-
Potassium arsenite
Potassium chlorate
Potassium cyanide
Potassium nitrate
Potassium perchlorate
Potassium permanganate
Potassium phosphide
Potassium silver cyanide
Promecarb
Propadiene
Propane
Propanenitrile
Propanenitrile, 2-methyl-
Propargyl bromide
Propionitrile
Propionitrile, 3-chloro-
Propiophenone, 4'-amino
Propyl chloroformate
Propyl chloroformate
Propylene [1-Propene]
Propylene oxide
Propyleneimine
Propylphosphonothioic dichloride
Propylphosphonyl difluoride
Propyltrichlorosilane
Propyne
Prothoate
Pyrene
Pyridine, 2-methyl-5-vinyl-
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)-
Pyridine, 4-amino-
Pyridine, 4-nitro-, 1-oxide
Pyriminil
QL
RDX
RDX and HMX mixtures
Salcomine
Sarin
Selenious acid
Selenium hexafluoride
Selenium oxychloride

Semicarbazide hydrochloride
Sesquimustard
Silane
Silane, (4-aminobutyl)diethoxymethyl-
Silane, chlorotrimethyl-
Silane, dichlorodimethyl-
Silane, trichloromethyl-
Silicon tetrachloride
Silicon tetrafluoride
Sodium arsenate
Sodium arsenite
Sodium azide
Sodium azide (Na(N3))
Sodium cacodylate
Sodium chlorate
Sodium cyanide (Na(CN))
Sodium fluoroacetate
Sodium hydrosulfite
Sodium hydroxide
Sodium nitrate
Sodium phosphide
Sodium selenate
Sodium selenite
Sodium tellurite
Soman
Stannane, acetoxytriphenyl-
Stibine
Strontium phosphide
Strychnine
Strychnine, sulfate
Styrene
Sulfotep
Sulfoxide, 3-chloropropyl octyl
Sulfur dioxide
Sulfur dioxide (anhydrous)
Sulfur dioxide (anhydrous)
Sulfur fluoride (SF4), (T-4)-
Sulfur mustard (Mustard gas(H))
Sulfur tetrafluoride
Sulfur tetrafluoride
Sulfur trioxide
Sulfuric acid
Sulfuric acid (aerosol forms only)
Sulfuryl chloride
Tabun

Tellurium hexafluoride
Tellurium hexafluoride
TEPP
Terbufos
Tetraethyl lead
Tetraethyl pyrophosphate
Tetraethyldithiopyrophosphate
Tetraethyltin
Tetrafluoroethylene
Tetramethyllead
Tetramethylsilane
Tetranitroaniline
Tetranitromethane
Tetrazene
Thallium chloride TlCl
Thallium sulfate
Thallium(I) carbonate
Thallium(I) sulfate
Thallous carbonate
Thallous chloride
Thallous malonate
Thallous sulfate
Thiocarbazide
Thiocyanic acid, methyl ester
Thiodiglycol
Thiofanox
Thiomethanol
Thionazin
Thionyl chloride
Thiophenol
Thiosemicarbazide
Thiourea, (2-chlorophenyl)-
Thiourea, (2-methylphenyl)-
Thiourea, 1-naphthalenyl-
Titanium chloride (TiCl4) (T-4)-
Titanium tetrachloride
Toluene-2,4-diisocyanate
Toluene-2,6-diisocyanate
Torpex
Toxaphene
trans-1,4-Dichloro-2-butene
trans-1,4-Dichlorobutene
Triamiphos
Triazofos
Trichloro(chloromethyl)silane

Trichloro(dichlorophenyl)silane
Trichloroacetyl chloride
Trichloroethylsilane
Trichloromethanesulfenyl chloride
Trichloronate
Trichlorophenylsilane
Trichlorosilane
Trichlorosilane
Triethanolamine
Triethanolamine hydrochloride
Triethoxysilane
Triethyl phosphate
Trifluoroacetyl chloride
Trifluorochloroethylene
Trimethyl phosphate
Trimethylamine
Trimethylchlorosilane
Trimethylolpropane phosphite
Trimethyltin chloride
Trinitroaniline
Trinitroanisole
Trinitrobenzene
Trinitrobenzenesulfonic acid
Trinitrobenzoic acid
Trinitrochlorobenzene
Trinitrofluorenone
Trinitro-meta-cresol
Trinitronaphthalene
Trinitrophenetole
Trinitrophenol
Trinitroresorcinol
Triphenyltin chloride
Tris(2-chloroethyl)amine
Tritonal
Tungsten hexafluoride
Uranium hexafluoride
Valinomycin
Vanadium pentoxide
Vinyl acetate
Vinyl acetate monomer
Vinyl acetylene
Vinyl chloride
Vinyl ethyl ether
Vinyl fluoride
Vinyl methyl ether

Vinylidene chloride
Vinylidene fluoride
Vinyltrichlorosilane
VX
Warfarin
Warfarin sodium
Xylylene dichloride
Zinc hydrosulfite
Zinc phosphide
Zinc phosphide (conc. <= 10%)
Zinc phosphide (conc. > 10%)
Zinc, dichloro(4,4-dimethyl-5((((methylamino)carbonyl)oxy)imino)pentanenitrile)-, (T-4)-

APPENDIX II-NTSIP - 1 POUND OR GREATER REPORTING LIST

1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene
1,4-Dichloro-2-butene
2,2-Dimethyl-1,3-benzodioxol-4-ol methylcarbamate
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
2-Acetylaminofluorene
2-Butene, 1,4-dichloro-
3,3'-Dichlorobenzidine
4-Aminobiphenyl
7,12-Dimethylbenz[a]anthracene
Aldicarb sulfone
alpha - Endosulfan
Aroclor 1016
Aroclor 1221
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Arsenic
Arsenic acid
Arsenic acid
rsenic disulfide
Arsenic trisulfide
Asbestos (friable)
Azaserine
Barban
Bendiocarb
Bendiocarb phenol
Benomyl
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis [4-methoxy-
Benzidine
Benzo[a]pyrene
Benzo[b]fluoranthene
Beryllium chloride
Beryllium fluoride
Beryllium nitrate
Beryllium nitrate
beta - Endosulfan
beta-BHC
Cacodylic acid
Calcium arsenite

Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
Carbendazim
Carbofuran phenol
Carbosulfan
Chlorpyrifos
Coke Oven Emissions
Creosote
DBCP
DDD
DDE
DDT
delta-BHC
Diazinon
Dibenz[a,h]anthracene
Dichlone
Dieldrin
Diethylarsine
Diethylstilbestrol
Dimethylcarbamyl chloride
Endosulfan sulfate
Endrin aldehyde
Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
Ethanol, 2,2'-oxybis-, dicarbamate
Ethene, chloro-
Ethyl methanesulfonate
Ethylene dibromide
Heptachlor
Heptachlor epoxide
Hexachloro-1,3-butadiene
Hexachlorobutadiene
Hexamethylphosphoramide
Hydrazine, 1,2-dimethyl-
Kepone
Lead arsenate
Lead arsenate
Lead arsenate
Manganese, bis(dimethylcarbamodithioato-S,S')-
Melphalan
Mercuric cyanide
Methoxychlor
N-Nitrosodiethanolamine
N-Nitrosodiethylamine
N-Nitrosomorpholine
N-Nitroso-N-ethylurea
N-Nitroso-N-methylurea

N-Nitroso-N-methylurethane
N-Nitrosopyrrolidine
PCBs
Polychlorinated biphenyls
Potassium arsenate
Propham
Pyrethrins
Pyrethrins
Pyrethrins
Silver cyanide
Silver nitrate
Streptozotocin
Thiodicarb
Thiophanate-methyl
Triallate
Vinyl chloride
Ziram

APPENDIX III- HISTORY OF THE NTSIP REPORTING LISTS

The baseline any quantity reporting list was developed for the HSEES program in 2005. The criterion for inclusion was a chemical that appeared on at least two of the selected lists of hazardous substances developed for emergency preparedness planning/response and other regulatory purposes. The lists and their sources are named below. Sodium hydroxide and carbon monoxide were added to the baseline list, based on the frequency of events with injuries in HSEES. Arsenic and lead were removed, because they are not considered acute exposure hazards under most exposure scenarios. The 2005 baseline Any Quantity Reporting List contained 73 chemicals. Additional chemicals may be added or removed from this baseline list based on analyses of event and victim data.

Lists of hazardous substances used for selection:

1 Emergency Response Planning Guidelines (ERPGs), American Industrial Hygiene Association.

2 Risk Management Plan Chemicals, EPA Office of Emergency Management, 40 CFR 68.

3 The ATSDR Division of Toxicology in collaboration with NIOSH and NCEH developed a master list of 494 chemicals that could be reasonably employed as weapons of chemical terrorism. ATSDR then prioritized this list based on 1) availability, 2) explosivity, 3) toxicity, and 4) prior use as a weapon. ATSDR created a list of 64 substances considered to be “Priority one”, based on these criteria. The HSEES program generated an additional prioritized list using the raw data provided by the Division of Toxicology using availability and toxicity only, resulting in a second list of 128 chemicals. Both the list of 64 and 128 were used.

4 Scientific Working Group on Forensic Analysis of Chemical Terrorism Draft List of Prioritized Chemicals, FBI.

In 2006, mercury and acetone were added to the Any Quantity reporting list based on the number of victims. Additionally, all of the EPA Emergency Planning and Community Right-to-Know Act (EPCRA) Section 302 Extremely Hazardous Substances were added. Substances on the Consolidated List of Chemicals Subject to EPCRA and Section 112(r) of the Clean Air Act that have a reportable quantity of 1, were made a new reporting list- 1 pound or greater. No additions/deletions were suggested for 2007-2009.

For the NTSIP Any Quantity reporting list in 2010 the Department of Homeland Security Chemical Facilities Anti-Terrorism Standard (CFATS) Appendix A chemicals were added

to the mandatory list. Future additions to the NTSIP mandatory list will be considered on a yearly basis.